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A
T R E A T I S E
ON
THE DISORDERS OF CHILDHOOD;

ADAPTED TO
DOMESTIC USE.

VOLUME THE FIRST:

CONTAINING
Every Complaint of Importance falling under
The more immediate Province

OF
THE PHYSICIAN.

[Price 10s. 6d. sewed.]

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TREATISE

OF
THE DISORDERS OF CHILDHOOD:

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THE PHYSICIAN.

By
J. C. G. [illegible]

A
T R E A T I S E
ON THE
DISORDERS OF CHILDHOOD,
AND
MANAGEMENT OF INFANTS
FROM THE BIRTH;

Adapted to DOMESTIC USE.

By MICHAEL UNDERWOOD, M. D.

LICENTIATE in MIDWIFERY

of the

Royal College of PHYSICIANS in LONDON,

PHYSICIAN to

Her Royal Highness the PRINCESS of WALES,

And SENIOR PHYSICIAN

To The BRITISH LYING-IN HOSPITAL.

IN THREE VOLUMES.

VOL. I.

LONDON,

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1797.

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TO
HER ROYAL HIGHNESS
THE
PRINCESS OF WALES.

MADAM,

As I cannot be insensible to the Honour of being permitted to dedicate to Your Royal Highness a Performance that has engaged much of my Time and Attention, I must congratulate myself that the Subject of it affords me a fit Opportunity of paying a small
a Tribute

Tribute of Veneration for Your
 Royal Highness's parental Virtues,
 as well as my most humble Ac-
 knowledgements for the Favours
 conferred on me in a professional
 Character.

THAT Your Royal Highness and
 Your illustrious Offspring may long
 enjoy the Blessings of Health, in
 Addition to those of Rank and
 Station, is the sincere Prayer of,

Your Royal Highness's

Most dutiful,

And most devoted Servant,

MICHAEL UNDERWOOD.

Great Marlborough Street,

October 31st, 1797.

P R E F A C E.

THE very flattering Reception with which the Author's former Labours have been honoured, in private Families, has induced him to devote his leisure Hours to adapt a Treatise on the Disorders of Childhood exclusively to their Use.

SUBJECT to a general Abridgment, some incidental Additions may be noticed, the Result of subsequent Recollection, or Experience; while the whole is rendered more plain and familiar

a 2

than

than the larger Editions, without the Suppression of any Thing congenial to the present Design.

POSSIBLY, some Readers may think the Work still too extensive, and rather stripped of Tautology and technical Terms, than strictly abridged. To this Objection it may be sufficient to say, that the Object of this Publication naturally led the Author to adopt the ample manner of TISSOT and BUCHAN, in preference to any popular Essays on infantile Disorders; which alike confined to a small number of Diseases, are, for the more part, far too indefinite

on

on the Subjects they embrace. It may likewise be urged, that had the Work been exclusively adapted to the less Intelligent, and many parts consequently left very incomplete, it would, probably, have perplexed the Majority, and satisfied None.

To have passed over the Degrees and Varieties occurring in every Complaint, would, indeed, have fallen equally short of the original Design, as to have treated only on the Disorders of the *Infant-state*. An Abridgment like this would prove a great Disappointment, and neither qualify Parents to prescribe to Advantage,

tage, nor discover when to conclude that better Assistance is required.

IN any case, it is, perhaps, not possible to meet the Wishes of All; and the Author may venture to say, that his Intentions have been good. Encouraged, therefore, as he has been, by the Patronage of many Families, he takes this overt Occasion of making his grateful Acknowledgments; hoping he shall neither forfeit their, nor the Public's good Opinion by the present Attempt.

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* *In New-born Infants, See the third volume.*

E R R A T A.

- Page 32, line 1, for odjection, read objection.
 118, line 3, in the prescription, for and, read ad.
 150, for myrrhe, read myrrh.
 248, last line, for tha-, read than.
 269, line 15, for distension, read distention.

TREATISE,

OF THE DISEASES OF CHILDREN.

THE attention repeatedly bestowed on this work, encourages the author to hope it may furnish an intelligent and correct account of children's diseases. If the very favourable reception of former editions, by readers not educated to the profession, has conspired to raise so flattering a conjecture, it has, at the same time, induced him to adapt the present exclusively to their use, and particularly to mothers of families. The writer has, indeed, long lamented the very improper method in which the disorders of infants

are treated by those who design them the greatest kindness, but whose mistaken opinions too often counteract their benevolent intentions. The laudable affection of the fondest mother frequently becomes a source of manifold injury to her tender offspring. And this is not only the case among the lower class of people, or in situations where medical assistance is procured with difficulty, but even in the metropolis itself, and in the higher ranks of the community, where many prejudices very hurtful to the ease and health of children still prevail.

INTERESTING, indeed, and important to society as is the subject of children's diseases, it has moreover been generally regretted by the best writers, that this branch of medicine has remained too much uncultivated; and, indeed, until of late years, little more has been attempted than getting rid of the wild prejudices and anile prescriptions of the old writers, which has too often served only to obscure

Secure the true nature of children's diseases. Another, and a very principal cause of so strange a neglect, has arisen from an idea some people have entertained, that, as medical people can have but a very imperfect knowledge of the complaints of infants, from the inability of children to give any account of them, it is safer to intrust the management of them to old women and nurses; who, at least, are not likely to do mischief by violent remedies, though they may sometimes make use of improper and inadequate ones.

How fatal such a mistake must be, is surely sufficiently obvious; since the destruction of infants is eventually the destruction of adults, of population, wealth, and every thing that can prove useful to society, or add to the strength and grandeur of a kingdom. It may, moreover, be observed, that where mismanagement at this period does not actually destroy the life, it often very essentially impairs

the health; the foundation of a future good or bad constitution being frequently laid in a state of infancy. Whereas, if its complaints are prudently managed, the tenderest children, after being, for a time, reduced by various debilitating complaints, turn out exceedingly healthy; the resources of infancy, as I shall have frequent occasion to notice, being as astonishing, as they are happily adapted to the great variety of accidents to which it is liable.

It is true, indeed, some laudable attempts have been made of late years to rescue this important trust from being indiscriminately committed to unskilful hands; but it is still to be lamented, that even in this liberal age, such attempts have not been attended with all the success they have deserved. It cannot therefore be improper, that something further should be advanced on the subject, in the hope of silencing the weak objections hitherto made against procuring the best
advice

advice as early as possible. And this is the more necessary, because those who have the greatest interest in the subject, the most authority on the occasion, and the sincerest affection for their offspring, have frequently the greatest objections to medical assistance, till it is, oftentimes, too late to employ it with effect; at least, this has, certainly, been too much the case, though it is hoped, the prejudice is daily declining.—I may, indeed, be very inadequate to the task of obviating it where it may still be in force, but I shall state an argument or two that has always appeared to me of great weight.

A PRINCIPAL objection, it has been said, is taken from the consideration of the incapacity of infants to describe their complaints; but surely, none can be ignorant, that the same difficulty occurs in a variety of the most dangerous complaints of adults at every period of life, which confessedly require the greatest assistance;

6 *Principal Causes of this Neglect.*

such are attacks of phrenzy, delirium, and some kinds of convulsions, as well as all the disorders of idiots and lunatics. But these have been successfully treated in every age, not excepting even lunacy itself, and the melancholy subject happily restored to society, his family, and himself.

It should likewise be considered, that if infants, for the reason above-mentioned, are to be excluded the benefit of a physician's advice, it is difficult to say at what age children may safely be intrusted to his care; since at the age of five or six years, they would frequently mislead the enquirer, who should trust to their own account of their complaints. Their ideas of things are too indistinct to afford us sufficient information, and they accordingly often call sickness at the stomach, pain, and pain, sickness; they will frequently make no reply to general questions, and when they are asked more particularly

ticularly whether they have any pain in one or another part of the body, they almost constantly answer in the affirmative; though it afterwards frequently turns out they were mistaken.

BUT I may venture to assert, that although infants can give no account of their complaints in the manner we receive information from adults, their diseases are all plainly and sufficiently marked by the countenance, the age, the manifest symptoms, and the faithful account given by the parent, or an intelligent nurse. This I am so confident of, that I never feel more at my ease, in prescribing for any disorders than those of infants, and never succeed with more uniformity, or more agreeably to the opinion I may have adopted of the seat and nature of the disease. Every distemper may be said, in some sense, to have a language of its own, and it is the business of a physician to be acquainted with it; nor do those of chil-

dren speak less intelligibly*.—Limited as is human knowledge in every department, there are yet certain principles and great outlines, as well in physic as in other sciences, with which men of experience are acquainted, that will generally lead them safely between the dangerous extremes of doing too little, or too much; and will carry them successfully, where persons who want those advantages cannot venture to follow them.—Let me ask then; is it Education, is it Observation

* In neither of these sentiments do I stand alone; HARRIS, of whose work SYDENHAM is thought to have spoken so highly, has said the same things.—I beg leave to remark here, that as quotations from writers in the dead languages would be more than superfluous in this edition, calculated only for the unlearned reader, I have omitted most of the notes found in former impressions, preserving only such as were judged worthy of translation, where a difference in sentiment, from modern authority, has rendered that of the ancients desirable. With the like view, certain quotations from, or a mere reference to cotemporary writers, in our own language, have been preserved.

and

and long Experience, that can qualify a person for the superintendance of infants, or the treatment of their complaints?— Surely all these fall eminently to the share of regular practitioners, to the utter exclusion of illiterate nurses and empirics.

HAVING briefly stated this matter, and given it the attention its importance demands, I proceed to the order of the present work, and variously solicit the candour of the reader. For its bulk, some reason has already been assigned, and, indeed, the alternative of saying too little, or too much, has been the subject of much consideration; and it is possible, that an ardent desire of affording ample information to those who might profit by it, and had expressed their satisfaction at the full accounts of former editions, may, in the opinion of others, have betrayed the writer into an extreme. For the manner in which the work, in other respects, has been executed, he shall just premise, that the most respectable authorities have been consulted,

consulted, a proper attention been paid to facts, and his best endeavours exerted to obviate the effects of that peculiar veil*, which is said to obscure infantile disorders. A practical arrangement of them has been studied, comprehending likewise the natural consecution of parts, and the order of time in which the complaints severally appear; that some conformity may be every where observed. Regard has also been had to their respective causes and symptoms, tending to elucidate their nature, and render their treatment more obvious than has been generally imagined.

* There is nothing to which this peculiar obscurity may be referred, but that incapacity of infants to describe their own feelings, which has been noticed already. But there are, it has been observed, other sources of information; and they are less fallacious oftentimes than the more literal descriptions of adults, which in nervous complaints particularly, would tend to perplex the ablest physician if he should always be led by them; and the like necessary discrimination will serve him equally well in the treatment of infants.

To their immediate Diseases, is added an attention to some of the principal Accidents and little Injuries to which the earlier periods of childhood are peculiarly liable. And here it may not be improper to observe, that whatever merit other publications may possess, it may, nevertheless, with great propriety be remarked, that they either make a part of some large systematic work, the bulk of which must be very foreign from the intentions of this treatise, or else they are far too concise, and have omitted complaints of too much importance to be overlooked, as well as been necessarily silent on many, with which the authors themselves were unacquainted.

THE disorders of childhood, however, it has been asserted, are nowise mysterious, nor would ever have been thought so, if they had always been submitted to proper hands, and been as carefully investigated as the diseases of adults. Nor
is

is it otherwise with those of the earliest infancy, of which it may be very safely affirmed, that as they are more obvious than it has been generally supposed, so their number is comparatively small, their cause uniform*, and the treatment of most of them, simple and certain†.

For the proof of this, as well as in order to establish a rational practice, I shall first consider the Causes and specific Nature of their complaints, before I attempt to enter upon their Cure.

* This is especially true of the disorders of this period, though it may be remarked, that there is evidently a greater *uniformity* also in the *causes* of the several disorders, even of older children, than there is in those of adults, which have very often various, and dissimilar remote causes, at different times, and in different habits: viz. Female obstructions, dropy, &c.

† Infants readily slide into diseases; but when not too late, or empirically treated, they are as readily restored to health. HARRIS.

AND

AND here I shall not attend to their various remote causes, but shall confine myself to a practical consideration of the subject, and briefly point out their obvious occasions and symptoms. And on this account I shall not take notice of all the changes which nature herself induces during the growth of children, as they pass from one stage of life to another; which are, doubtless, remote causes of some of their complaints.

A PRINCIPAL CAUSE, mentioned both by ancient and modern writers, is the great moisture and laxity of infants: which is necessary, however, in order to the extension of parts, and the rapid growth of young children. This laxity arises from the vast glandular secretion; their glands in general being much larger in proportion, than those of adults. Of these, there is a great number situate within the mouth, in the gullet, stomach and bowels, which are continually pouring out
their

their contents into the first-passages. This is, doubtless, a wise provision of nature, and I cannot, therefore, think with some writers, that the stomach juice, renders the chyle (or nutritious fluid extracted from our food) less fit for absorption, for without a due proportion of it, no good chyle can be made; but as we do not strictly follow the dictates of nature in the management of children, as to their food, manner of clothing, sleeping, &c. this abundance of slimy matter may often overload the stomach and bowels, the constant seat of the first complaints in the infant state. A second cause arises from the great irritability of the nervous system, and the delicacy of the muscular fibres, whereby the ferous juices do not readily enough return, but remain longer than is consistent with a free circulation through the extreme parts. The quality of the milk, or other food with which infants are nourished, may be accounted a third.

In

In addition to these general causes, may be reckoned the want of exercise*, which at a more advanced age, happily for us, we are obliged to make use of, and which art, in general, does not duly supply in regard to infants.

HENCE arise acidities in the first-passages, a constant attendant upon all their early complaints. Among the first of which, has been reckoned the retention of the meconium; and the last (which may be termed a disease at all peculiar to in-

* Exercise is the grand mean of health.—The irrational species are capable of affording it to themselves almost as soon as born; and though infant children are not, they are passive, and can be *exercised*. Nature and instinct point out the expediency of it, and the fond mother who follows only her own inclination, naturally, and insensibly adopts it, and is continually stroking and playing with her little innocent idol, whenever it is awake; and as it grows older, she is led on to give it more exercise, as it can bear it, and according to the satisfaction the infant never fails to manifest on the occasion.—On this head see the *Article of Motion and Rest*, Vol. III.

infants)

infants), is the cutting of the teeth, in which likewise the state of the bowels is very much concerned.

UPON each of the above heads, it may be necessary to make further observations as occasion may offer, in order to take notice of certain accidental causes arising from mismanagement, or errors in the *non-naturals**, as they have been called; especially in regard to the quantity of nourishment administered to infants, and an inattention to the state of their bowels.

THE SYMPTOMS of these first diseases of infants, (by which we also judge of their nature), are chiefly retention and excretion; sour belchings; sickness; vomiting; purging; the nature of the matter thrown off; watching; inquietude; contraction, and sharpness of the features; blueness about the mouth; turning up of the eyes; thirst; heat; the manner of

* Such are *food, air, exercise*, and the like. See Vol. III. Devoted to these subjects.

breathing and of crying ; retraction of the lower extremities ; and pustules, or eruptions, external, or internal. The pulse and urine are less certain marks, in the greater number of their complaints, than they are in older children and adults. To these may be added, the openness, or firmness of the fontanelles, or moles, and of the futures ; the strength and figure of the bones ; and the relaxation or contraction of the skin.

HAVING thus briefly adverted to the general causes and symptoms, I shall now proceed to the consideration of the Disorders themselves ; and shall begin with one, hitherto unnoticed by writers, which though very rare, may be the first that can take place after birth, and is a kind of

FAINTING.

MANY new-born infants, it is well known, from some difficulty in the birth, lie

lie for a time, in a very feeble and uncertain state, with no other sign of animation than a weak pulsation of the heart, and the arteries of the navel-string: but whenever the circulation and breathing become free, children do not seem to suffer from it, and rarely relapse into a very languid state.

In the case, however, of the true syncope, or fainting, here intended, infants may lie moaning and languid for several hours, and after this faint away completely, in the manner of adults. In this state they may continue for a quarter of an hour, or more, without any sensible respiration, except now and then a gasp, or a sob; and the face be as pale as a corpse. These attacks may return several times, though the infant should sleep composedly, and even take the breast between whiles.

THE proper remedies are gentle stimulants and cordials; such as rubbing the nostrils, temples, and the feet and hands with sal volatile; and as soon as the infant

fant

fant becomes capable of swallowing, a few drops of the volatile tincture of valerian should be administered in some generous white wine, and repeated every two or three hours, until the child shall appear perfectly recovered. Stools should also be procured by clysters, or a tea-spoonful of castor-oil.

THE volatile tincture of valerian, administered in like manner, is also a good remedy in other instances of great languor, after the first-passages have been properly cleansed; as will be further noticed under the head of convulsions.

DISCOLOURATION *of* NEW-BORN INFANTS.

AN affection of new-born infants not much more common than the former, is a discolouration of the face and extremities, and sometimes of the whole body, seemingly independent of the circumstances attendant upon the birth. A mere dis-

colouration of the face after laborious births, is, indeed, very common, and gradually disappears, without affording any occasion of alarm. But in the present instance, the parts are very black, and afterwards turn of a leaden-blue colour; sometimes appearing the moment an infant is born, and at others have not been particularly noticed for an hour or two afterwards. In some instances the discolouration of the face is found to be only partial, appearing in spots; the greater number being of the size of small peas, but some larger. In many cases, the discolouration abates a little, and in others not; sometimes it goes entirely off, and returns again, and in that case is of more serious consequence, and commonly dangerous. For this recurring blackness is found to depend upon some internal malformation or derangement, (similar, though not precisely the same with one to be noticed under the head of congenite disorders) and for which nothing

thing that I know of can be attempted, but the general remedies for fits; by which it is usually followed when none of the little subsequent means prove effectual.

FROM the result of this recurring blackness, it seems always to be owing to some fixed cause, excited into action by certain circumstances, particularly any sudden agitation of body or mind. In such cases, the disappearance of the discolouration is followed by a return of a tinge of as deep a colour as at first. But in the innoxious kind, which is the more immediate subject of this chapter, though the blackness in some instances, after abating a little, again returns, it never acquires the deep colour it had at first, and when it has once compleatly disappeared, it never returns.

THIS discolouration, therefore, probably depends merely on some spasm affecting the external veins, and interrupting the free return of the blood into the

larger vessels. Where this is the sole cause, the discolouration, howsoever great, is, probably, harmless, and would in every case soon abate, and in time entirely disappear; but is, nevertheless, removed sooner by proper remedies. The only necessary means seem to be, to procure stools, (which should be immediately solicited by clysters); to excite vomiting if the infant appears to be sick at the stomach; and to rub, or gently chafe the body and limbs before the fire. But nothing tends to remove the blackness so suddenly or sensibly, as applying a leech or two upon, or near the livid parts; and should therefore always be had recourse to, if the blackness does not very evidently abate in an hour or two after birth, by the help of one or more of the means that have been recommended.

A DISORDER as common as the two foregoing ones are rare, and probably the next in order of time is,

The RETENTION of the MECONIUM.

THE MECONIUM is that black, and tenacious matter, which, it is well known, every infant parts with by stool, for the two or three first days after it is born, or retains it to its manifest injury.

THE ordinary source of infantile complaints has already been said to originate from something amiss in the first-passages, according to the most ancient writers. And I have long suspected, that a foundation is sometimes laid for them, from not duly attending to an early expulsion of the meconium; which will sometimes firmly adhere to the coats of the bowels, and remain for many days, unaffected even by powerful medicines, as I shall have occasion to remark as I go on: sometimes occasioning dangerous complaints from the birth, and at others, giving rise to more remote evils. I shall only ob-

serve in this place, that though it should not be all retained, yet a part will often remain much longer than has been usually imagined, and will come away, perhaps unnoticed, at a late period, where no retention of it has been suspected. Of this I can have no doubt, having been called to visit infants after the month has been expired, who have been unwell through all that period, and from whom meconium has still been coming away. A tea-spoonful of castor-oil, given once or more, has soon carried off a great quantity; upon which all their complaints have disappeared.

THE meconium is, probably, no longer of use after the child is come into the world, unless it be to keep the bowels from collapsing, till they can be replenished with the aliment the child is soon afterwards to receive. Whereas, if it be not soon carried off, it will not only change the quality of the milk, or other food, as it descends into the bowels, but
itself

itself also becomes highly acrid, (the greater part of it being bile) and cannot fail to produce indigestion, flatulency, pain, purging or costiveness, and other similar evils : and the meconium is further disposed to this acrid state, on another account, *viz.* from the admixture of atmospheric air. Whilst the infant remains inclosed in the womb, it is secured from all contact of air, and therefore the alimentary contents remain harmless and bland, though increasing for many months ; but it is well known, how soon every secretion or extravasation will become acrid, upon the admission of air into any cavity where it may be lodged. And it is, doubtless, on these accounts, that provident nature has imparted an opening quality to the first milk of all animals ; a certain indication to the rational species, to assist the expulsion of this matter, now no longer required. For though a child should even be suckled by its own mother, (in which case, there is, doubtless, less occasion

occasion for other assistance) yet we know that nature doth not, in every instance, always fully accomplish her own designs: and it is from some striking instances of the truth of these observations, that I have said so much on this subject, which I have also been the more inclined to, because so many writers have passed it over almost in silence.

I AM aware that all those who esteem medical people to be officious disturbers of nature, have objected to their assistance in this instance, and conclude, that she would do the business much better if left to herself. And there are even some physicians of this opinion, amongst whom I find Dr. BUCHAN, whose abilities and reputation claim particular attention; though he, perhaps, may not be so much engaged among very young infants, as those whose peculiar province it is to attend them at their birth. But there can be no general rule without exceptions, and as, doubtless, many children would do very well without

without any such assistance, so have I found others who would not*, though suckled by the parent herself, of which I shall relate a very striking instance below. On the other hand, I believe, no infant can be essentially injured by constantly assisting in this work, provided the means first made use of be lenient; as they ought always to be.—It is the province of art to superintend nature, and not only to guard against her excesses, but so to watch over her, as to ensure the accomplishment of her intentions, whenever we perfectly comprehend, and can effect them without the risk of doing harm†. And this intention is as rational, as the practice is suc-

* Indeed, it is now well known, that the formidable disease, so fatal to new-born children in the *West-Indies*, called the locked-jaw, or jaw-fallen, is almost always owing, either to unwholesome, and confined air, or to a want of purging off the meconium.

† A tree will produce fruit in its wild state; but by human culture the tree is often preserved, and its fruit improved far beyond the course of nature.

cessful,

cessful, there being an evident acidity in the meconium, as I have ascertained by repeated experiments. The red-gum and thrush are also much more rank where the symptoms of acidity are most prevalent, and on the other hand, less commonly take place (as I have for many years observed) where the meconium has been early purged off.

For this purpose, amongst others, a new remedy has of late years been recommended, as preferable to any purging medicines whatever*. Mankind has ever delighted in extremes—no sooner has any thing, formerly judged to be hurtful, or even poisonous, been found in certain cases, to be very useful, than it is supposed to be capable of doing every thing, and supersedes all that the wisdom of former ages has proved to be salutary. Hence, some advantages experienced from

* Dr. ARMSTRONG, *On the diseases most fatal to infants.* 1767.

the use of wine of antimony, in a variety of children's complaints, as far as they arise from one common cause, has induced some people to extol it as a universal remedy. But wherefore give an emetic, calculated to empty the stomach, in order to expel the meconium from the lower bowels*? It is universally allowed, and by this writer also, that emetics are not to be administered when the bowels are full, which, in this instance, is precisely the case. It is true, the wine of antimony does not always vomit children, nor will a little matter oftentimes do this, (as I

* On examining the first-passages of still-born infants, (newly dead) it appears, that the large intestines contain the true meconium; the smaller bowels, only a thin bilious fluid mixed with a little gastric-juice. The stomach contains still less, as no bile can enter it but by regurgitation from the bowel into which it opens, and the stomach-juice is in small quantity, not enough to be brought up by an emetic without violent straining; which I should imagine it can answer no good end to excite by a vomit, the first hour a child comes into the world.

shall

shall have occasion to take notice very soon); it is sometimes, indeed, found to act as a purgative: but if this be the intention, why not adhere to the old, and more certain method, and direct at once such things whose proper operation may be depended upon? Not the stomach, but the bowels, are the natural and safe outlet for most infantile complaints, and a want of due attention to this circumstance has been productive of some evils, which many practitioners, I think, are not sufficiently aware of.

It is very evident, that some gentle purgative is indicated on this occasion, and that it should be of such a kind as will create as little disturbance as possible, and especially should not be of an offensive, or indigestible nature; though such have been very commonly advised. In general, indeed, a very little matter will suffice; perhaps a little syrup of roses, diluted with some thin gruel, and given occasionally by tea-spoonsful, will mostly
answer

answer the end; will also serve to keep the child quiet, and so prevent the nurse from giving it improper food. But if this should fail to procure stools, a watery infusion of rhubarb, or a tea-spoonful of the wine, diluted as above, will be found preferable to the indigestible oily mixtures in common use. In the country, where the above medicines may not be at hand, a little fresh whey and honey will be an excellent substitute*.

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* As I am professedly writing for the benefit of the intelligent parent, I shall take this early opportunity of dropping a hint in regard to the *doses* of medicines, as a kind of *general* guide, where the exact dose may not be pointed out. Indeed, it were impossible, in many instances, to prescribe in such a manner as to afford no latitude to the discretion of those who are watching the infant, and are eye-witnesses to all its complaints; and I might rather lead the less intelligent into errors, by attempting to lay down very particular and precise directions.

The rules I shall here offer will chiefly refer to vomits, purges, anodynes, (or composing medicines) the testaceous powders, termed absorbents, and mercury.

Every

THE objection now made to oily medicines is very much increased, from nurses scarcely

Every one knows, that the doses of medicines should be adapted to different ages; but these are not in mere arithmetrical or geometrical proportions, and their due relation is only to be ascertained by experience, and in a reference to all the varieties of constitution, and habits.

From the result of daily observation, one may say, for example, to a child of *seven years old*, nearly the *half* of the dose suitable for *adults*; to one of *three years*, the *fourth* part; of *one year*, the *sixth* part; and the *eighth* or *tenth part* to an *infant* in the *month*.

An *adult* person may take from fifteen to thirty grains of the *testaceous powders*, and double that quantity of *magnesia*, at a dose, to be repeated several times a day. —From fifteen to thirty grains of *iphecacuanha*, and from one to two, of *emetic tartar*, as a *vomit*. From one to two ounces of *salts*, or of *manna*, and from ten to thirty grains of *jalap*, and from four to ten of *calomel* as a *purge*. From ten to thirty drops of *laudanum*, the like number of grains of the extract of the *white poppy*, and from half an ounce to two ounces of its *syrup*, as an *anodyne*.

From this two-fold direction, parents may, perhaps, attain to a more accurate estimation of the *dose* proper for their children, by means of the experience they may have had of the particular quantity of any of the
above

scarcely ever giving the quantity that is directed, in the course of the first twenty-four hours, as it is always designed; and administering the rest long after the child has begun to suck, or to feed. At this period, mixing with the nourishment, it has a direct tendency to produce indigestion, wind, and the very complaints, which the oils, administered in proper time, were designed to prevent. Not to add, that some kind of oily medicine being the usual purgative on this occasion, is an inducement to parents and nurses to procure a repetition of it, and to administer it whenever an infant happens to be costive during the month; and from whence, the above evils may be frequently induced.

BUT it has been observed, the meconium is not always disposed to come away,

above medicines usually found sufficient for themselves, whereinfoever that happens to vary from the dose here stated as proper for adults.

even by the assistance of common purgative medicines. Having, therefore, begun with such as the above, if the child has no stool for twelve or fourteen hours after birth, and especially if it should seem to be in pain, a clyster ought to be thrown up; which may be repeated, if necessary, a few hours afterwards. And here I would remark, that in the cases where more powerful remedies are required, scarcely any evacuation will be procured by these gentler means; for, as far as I have seen, wherever I could procure one copious stool by a clyster, or gentle laxative, the rest of the meconium has come away with little, or no further assistance. But as it sometimes happens, that neither clysters nor purgatives have any sufficient effect for several days, very powerful means must then be made use of; there being reason to suspect an unnatural suspension of nervous influence. I shall close this subject therefore, with hinting at a remarkable instance of this kind, (of which, I have

I have seen many,) as a proof of what powerful remedies may sometimes be required, and how necessary it is to pay some attention to this early complaint of infants.

THIS child lay in a convulsed state, and in great pain at times, for six days, and was nourished chiefly by a tea-spoon with a little breast-milk, seldom reviving sufficiently to suck. During this time, it had no stools, but such as made only a few spots on the cloths about the size of a shilling, and those were very small, hard, and lumpy.—In the course of six and thirty hours, I prescribed two ounces of the common infusion of fenna, two drams of rochelle salts, four grains of jalap, and a grain of calomel; besides purging clysters, and the use of the warm-bath. The next day, the child took four grains of ipecacuanha at two doses, and forty drops of the wine of antimony, at four times, (in the course of an hour) without any effect; and at another period, six drams of castor-oil,

oil, besides several doses of manna. Three days after the child had gotten rid of the meconium the thrush made its appearance; which was slight, but continued above three weeks.

FROM such instances, as well as the remark already offered on the *Locked-jaw* of the *West-Indies*, the expediency of having recourse to some safe and effectual means of purging off the meconium seems to be evidently pointed out; more especially when we consider the dangerous complaints, which are said to arise in some of the hospitals in *Paris* from an undue retention of this viscid matter, as will be further noticed in another place.

INFANTILE-JAUNDICE.

THE Jaundice of infants seems always to have been improperly conceived of. Those who have written only on children's diseases, have usually passed it over in silence,

lence, whilst others have considered it always as rather a serious complaint, and have prescribed as for the jaundice of adults. On the other hand, parents and nurses have usually accounted the common yellowness that appears about the third day after birth, (termed by some the yellow-gum) as the true jaundice. Neither of these opinions seems to me to be just; for the latter of these appearances requires no attention at all, and though infants are not very often troubled with the true jaundice like adults, they nevertheless are liable to flightier affections of that kind which claim some attention. These are easily distinguished from the yellowness, mentioned above, by the white of the eyes, being always very yellow; but the nails are not tinged, as in the jaundice of adults*, though it is probable they usually would be, if the complaint were long neglected,

* See the *Note* in page 39.

and the child suffered to be costive. I have waited some days to see if the yellowness would go off of itself, as the usual tinge does; but it has always increased rather than diminished. It arises from viscid matter obstructing the gall-ducts, and therefore requires a little emetic. The tartarised wine of antimony* is a very proper one on this occasion, as it may likewise procure two or three stools; but as children in this complaint are not easily made to vomit, should the wine fail, I would advise three or four grains of the powder of ipecacuanha, which is more certain in its operation; and the next day give four or five grains of rhubarb. Should the symptoms continue, the emetic ought to be repeated after two or three days, and rhubarb be given about every other day, till the yellowness disappears; which, under this treatment, never continues more than

* This, the parent should be apprized, is much stronger than the common antimonial wine.

ten or twelve days, unless the infant be very costive, or the stools are of a very pale colour; which is but rarely the case. Where an emetic has been objected to, and the whole attention confined to keeping the body open, the yellowness has continued when I have taken my leave at the end of the month, attended with languor, and other symptoms of debility. In such instances, some infants are found to have a true jaundice, and require some saponaceous medicines, such as the water of prepared kali (two or three drops for a dose) together with daily frictions of the stomach and belly, and the use of the warm-bath.

WOMEN long afflicted with jaundice, during any part of their pregnancy, and even actually brought to bed in that state, do not infect their children, unless they also suckle them*; but, from some striking in-

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stances,

* I have myself never met with such an instance; but Mr. BAUMES, who has been very attentive to the disease, is satisfied, that he once saw an infant so infected from

stances, I have found, that suckling in that state is capable of communicating the true jaundice to a great degree, and that it will not be cured, but by the recovery of the suckling-mother or nurse, or by the infant being weaned, as well as properly treated.

INFANTILE-ERYSIPELAS, *or* ST. ANTHONY'S
FIRE.

THIS disease does not appear to have been distinctly noticed by any preceding writer.

from the womb: but in this case, the child died very soon in a very diseased state, the internal part of the liver being in a state of suppuration. Other instances are given, but they are not unexceptionable. I have, indeed, lately seen an infant (the mother of which, however, had no jaundice) whose finger-nails were, at the birth, of as deep a yellow as in any jaundiced adult, and very sensibly from a tinge underneath them; but those of the toes were not at all discoloured, nor had the infant any other symptom of jaundice. It, indeed, brought up, by puking, a considerable quantity of yellow matter, apparently bile, very soon after it was born; but the tinge of the nails disappeared the next day, and the infant throve very well.

The

The FRENCH have, indeed, spoken lately of a somewhat similar affection, combined with other complaints infecting crowded hospitals; the disease, however, does not appear to have been any where noticed in its simple and genuine form. If this be the case (in respect to the form in which it now appears) it seems necessary to give a name to the disease, which I have apprehended, may, with propriety, be termed, the *Infantile-Erysipelas*.

It is a very dangerous species of that spurious inflammation, and is not very often met with, but in lying-in hospitals. The ordinary time of its attack is a few days after birth; but it is sometimes met with much later. It seizes the most robust, as well as delicate children, and in an instantaneous manner; the progress is rapid; the skin turns of a purplish hue; and soon becomes exceedingly hard.

THE milder species of it appears often on the fingers and hands, or the feet and ankles, and sometimes upon, or near the joints,

joints, forming matter in a very short time. The more violent kind is generally seated about the share-bone, and extends upwards on the belly, and down the thighs and legs; though sometimes it begins in the neck, and is equally fatal. The fact, indeed, seems to be, that it is always more dangerous when it seizes, or spreads to any parts of the body, than when confined to the limbs. The swelling is but moderate, but after becoming hard, the parts turn purple, livid, and very often mortify, especially in boys, when it falls on the scrotum; the penis swells, and the prepuce then puts on that kind of windy appearance, which it has when a stone is sticking in the passage; or in the watery-rupture.

UPON examining several bodies after death, the contents of the belly have frequently been found glued together, and their surface covered with a fetid exudation. In males, matter has been formed in the scrotum, which has evidently made its way from the cavity of the belly, and accounts

counts for the appearances of the organs of generation just now described: in females, the external genitals are affected in like manner, the matter having forced a passage through the rings above the groin.

VARIOUS means were made use of at the *British Lying-in Hospital* without success, though the progress of the inflammation seemed to be checked for a while; but it soon spread, and a mortification presently came on, or when matter had been formed, the tender infants sunk under the discharge. It is now several years since I proposed making trial of the bark, to which sometimes a little of the aromatic confection has been added, and compresses wrung out of camphorated spirit, have been applied to the parts; from which period several have recovered: nevertheless, the greater number of infants attacked with this disorder, still sink under its violence, and many of them in a very few days.

In some late instances, the disease has been attended with some varieties. In-
fants

fants have not only come into the world with several hard, and sub-livid inflammatory patches, and ichorous vesications about the belly and thighs, but with other spots already actually in a state of mortification. An eschar soon spreads to near three inches in length along the shin, with smaller ones about other parts of the legs, and on several of the toes and fingers. In such cases particularly, the bark and cordials must be exhibited liberally, and the inflamed and mortified parts be covered with spiritous fomentations, and other warm applications.

FROM the good effects attending the use of these means, particularly on a very copious use of the bark, there is further room to hope, that we may be yet more successful in the treatment of this formidable disease; which has not, however, appeared so frequently at the hospital for the last seven or eight years, as in former times.

MORBID SNUFFLES.

THIS disorder has passed under the general name of the *snuffles*, on account of the kind of noise such infants make in respiration; but it is not only a far more severe, but a very different complaint from the one usually intended by that name. It more commonly takes place in the month, and usually in the first or second week after birth. The discharge is much more abundant than that arising from taking cold, and is truly purulent from the beginning, and afterwards thin, though in a few instances, children affected with every other symptom of this disorder, have no discharge from the nose. But under every form of the disease, infants always appear weakly, and as if unwell, though without any precise complaint, and are more or less incommoded from the stoppage of the head, especially in their sleep; during which

which they breathe with difficulty. It generally continues for several weeks, and upon its going off, children, who have had the disorder only slightly, have become otherwise unwell, and such as have been brought up by hand, have been dangerously ill in their bowels.

THIS disease, like all other disorders, is much more violent in some instances than in others. In all, a peculiar attention must be paid to the bowels, especially that they be kept more than commonly open; and to attend to the nurse's diet if the infant be suckled.

DR. DENMAN having, a few years since, obliged the public, with an ample account of this novel disease, which had then fallen more frequently in his way, than in any other practitioner's, I shall premise his remarks, and then add such as later experience has furnished, and I shall be rather more explicit on this disorder, than on many others that may be considered as above the management of ordinary readers, because

because the complaint being as yet but little known, and more dangerous than would be apprehended, it might not otherwise be sufficiently distinguished from the effects of a common cold, until it would be too late to attend to it with effect.

DR. DENMAN'S observations agree with mine, that the disorder was first noticed in the year 1790; that the formidable symptom is the difficulty of breathing through the nose; that this is not constant, and that when free from it, children appear to be in no danger; that the difficulty, at other times, is so great as to require an attendant to watch the child sleeping and waking, in order to open its mouth as often as it may be requisite. A singular purple streak is likewise noticed at the verge of the eye-lids; which may be considered as a precise mark of the disease. A general fulness is also observable about the throat and neck externally, taking place soon after the commencement of the complaint; which DR. DENMAN seems to date

date from the appearance of the purulent discharge from the nose: though it has been remarked, that this symptom, although one of the most formidable, may be entirely wanting.

WHEN the above symptoms have continued for some days, according to the strength of the patient and degree of the disease, children begin to swallow with difficulty, and become pale and languid: at this time also the glands of the throat become swelled, and of a dark red colour, with ash-coloured specks upon them, and in some there are extensive ulcerations. The parts on which blisters have been applied in the beginning of the disease, and which had been apparently healed, often sphacelate towards the conclusion.

THE infants gradually decline in their strength, and have a particular catch in respiration. They are unable to suck, though not universally; they swallow with difficulty whatever is given them in a spoon; and die in convulsions, or with all
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the marks of great debility, though not on any particular day of the disease. Dr. DENMAN observes, that in the course of eight months he had attended eight children in this disorder, six of whom died.

THE true nature of the disease, and consequently its appropriate treatment, were for a considerable time but ill understood; and hence arose its frequent fatality. It would be superfluous, therefore, to state the means formerly made use of; neither can it be necessary to add much to the more satisfactory, though hasty account, which I added to the last impression, by way of appendix. It need only to be observed, that Dr. DENMAN, by a fortunate occurrence, discovered the true nature of this disease, and in consequence, happily adopted a remedy that has proved an almost certain cure for it, if attended to in time.

THE true source then appears to be a defluxion and inflammation over all that extent of membrane that lines the posterior

nostrils and contiguous parts. Hence, the copious secretion of purulent matter irritates the wind-pipe, and produces that spasm, and croaking noise, with recurring sense of suffocation, so uniformly observed in this disease. By descending into the stomach and bowels, it disorders these parts; and if not very soon properly treated, induces such general disease as presently debilitates, and at an uncertain, but generally an early period, carries off the little patient, in the manner that has been already described.

FROM this account of the disorder, an attention to the state of the bowels, as I intimated in the first instance I had seen of it, is the manifest indication; but with this further light thrown upon it by Dr. DENMAN, that keeping them very open, so as to prevent the lodgment of the matter falling into them, is the grand mean of cure: there being much less to be effected by absorbents and ant-acids to correct the constant sourness, and ill-condition of the stools,

stools, than by carrying them off speedily and frequently.

To this end, one or more tea-spoonsful of castor-oil should be given every day, so as to procure three or four motions daily. If a child should be weakened by this mean, which will rarely be the case, some cordial medicine should be occasionally interposed; or should this prove insufficient to support the infant, the purgative must be somewhat abated: but it is remarkable, that even weak infants endure purging better under this complaint than any other, unless it be the tooth-fever. If a convulsion fit should supervene, as it sometimes does, clysters, and the usual remedies for spasm should be administered, and especially the cordial; which breaking off wind from the stomach, and giving tone to the bowels, becomes a very useful one in this case. In several instances, a recourse to opium has been attended with good effect.

UNDER such treatment, the morbid-snuf-

fles has been found to yield in the course of two or three weeks ; some purging medicine being continued as long as the discharge, or difficulty of breathing shall remain. It, however, sometimes runs on as much longer, and is attended with a spasm in respiration as if the infant were dying: this symptom, as well as the snuffling, often recurring some time after an infant has seemed to be cured. In such instances, besides purging, it has been thought useful to foment the bridge of the nose, and afterwards apply some aromatic liniment.

WHEN the disorder is found not only to hang on for many weeks, (as it sometimes will where it has not been peculiarly violent) but together with the continued use of purges, to keep the infant pallid and feeble, notwithstanding the exhibition of cordial medicines; a recourse to the infusion of oak-bark has at once removed the snuffling, and given vigour to the child, in the course even of a few days.

IT

It is necessary only to add, that though this disorder had never till very lately been met with after the month, I have seen one instance of it in an infant of a quarter old; who was, nevertheless, thought, I know not how justly, to have had some slight symptoms of it in the month.

INWARD-FITS.

ANY derangement of the first-passages is capable of giving rise to various complaints, among which, that of inward-fits, has lately been taken notice of by some medical people, but I think scarcely deserves the name of a disease. It demands attention, however, because so much has been said about it as to expose the fond parent to continual apprehensions, lest this subtle disease should be insensibly at work, and making way for more severe, and outward convulsions.

THIS complaint may take place at any period of early infancy, and is said to be

more dangerous the younger the infant may be. A constant symptom in this kind of fit, as it is called, is the infant's little mouth being drawn into a smile; which whoever has noticed must have beheld it with pleasure. And if the complaint extends no further than this smiling, which is generally in its sleep, it arises merely from a little wind, and is certainly harmless, because in this case the wind is not really confined; and therefore an immediate recourse to pukes or purges, is more likely to do harm, by straining the stomach, or by relaxing the bowels, than to do any good. Every body is acquainted with the effects of different degrees of irritation of the nerves, from the sensation produced by tickling with a feather, to that of a hard gripe, or a violent blow. The first may be said to be pleasing; and such, I doubt not, is the stimulus in question on the nervous coat of the stomach of little infants, and therefore produces so agreeable a smile, that I could never consider it any more

more as an indication of mischief than of pain. Indeed, I know of no complaint that ought to be termed inward-fits; and I mention this, because nurses are continually talking about them, when children are perfectly well, and often give the fond parent needless distress, as well as many an unpleasant medicine to the child*.— They are at the same time treating the true convulsion, whilst slight, in the same way, being led into the error by the idea of inward-fits; a term they are ever using, but have no precise idea of, nor do scarce any two of them, nor, indeed, medical writers, mean the same thing by it. It were therefore better, perhaps, the term were altogether abolished; as the child is either evidently convulsed, or has no kind of fit, at least none for which any remedy can

* It were certainly a good rule, to administer no medicine to infants for such symptoms as do not indicate some real complaint, unless where experience proves that such symptoms neglected are apt to forerun some well known disease.

be offered.—Infants, as well as adults, do sometimes, indeed, die suddenly without any manifest convulsion. But this more frequently happens after over-feeding, and arises from a spasm of the stomach, (of which I shall treat in the chapter on true convulsions;) or sometimes of the heart or lungs; and infants may then be said to die of inward-fits, there being no external convulsion. Infants likewise die suddenly from water in the head, of which I have seen two instances in the same family, the children being well a few minutes before they died: but neither of these occasions are by any means, the kind of affection usually understood by the term inward-fits.—If the infant should sleep too long, and this smile should often return, the infant may be taken up, gently tapped on the back, and its stomach and belly be well rubbed by the fire; which is all that can be necessary. This gentle exercise will bring a little wind from its stomach, and the child will go to sleep again quietly.

THIS

THIS complaint, however, is largely treated of by some writers, and Dr. ARMSTRONG wishes to give a few drops of wine of antimony; but it is very apparent, that when he considers it as worthy of more attention than I have just now advised, it is either a true convulsion, in which the eyes are distorted, and the mouth is discomposed, instead of putting on a smile, or else he is prescribing for another disease under the name of inward-fits, which former writers have treated under the head of disorders arising from costiveness and wind. But if this little turn of the features should arise from constant overfeeding, it were endless to administer emetics; the cause of the complaint is obvious, and upon the removal of it the remedy must rest.

SUCH has ever been my opinion of this much-talked-of complaint; and indeed, I have not to this day, after a good deal of attention to infants, seen any thing sufficient to induce me to alter it; or I would have

have cheerfully retracted the preceding observations. As I wish, however, to afford all the information I can on every complaint, I have to observe, that a gentleman of great respectability and experience, has conceived, that though the term, inward-fits, has been often misapplied, there is really such a complaint, and that it generally proves fatal. Besides a little blueness of the lips, and slight turning up of the eyes, often noticed by nurses, this complaint is described to me as attended with a peculiar sound of the voice (somewhat like the croup) and a very quick breathing, at intervals; and is supposed to arise from a spasm of the stomach, lungs, or other vital organ.

It was not till after some time, that I could form any precise opinion of this complaint, not having met with it during many years close attention to the disorders of children. At length, however, instances occurred with all the precise marks of the complaint, as I noted in a former

former edition; and accordingly offered my opinion with becoming diffidence. Since which time I have been further acquainted with this singular spasm, and have succeeded in removing it in every instance, by treating it as I had before hinted, as a chronical croup, and administering *asafoetida*, oil of amber, tincture of foot, musk, or the hemlock-pill; nor have I been able to learn, after diligent inquiries, that children so affected have afterwards been carried off suddenly, or by any thing resembling this complaint, except in one instance, where water in the head had been previously suspected.

I HAVE, indeed, of late years seen the chronical croup very frequently in children of various ages, and indiscriminately in those nourished by the spoon, or the breast. I have known it attended with severe and repeated epileptic fits (and then the bowels have usually been costive, or the stools very clayey); but in every instance the crouping has yielded, and (with the exception

ception above-mentioned) children have done well, treated as for the chronical croup, which I still think may be the real complaint.

IN regard to costiveness and wind, which have been said to be the parent of what nurses commonly term inward-fits; as they do not always arise from one and the same cause, and are productive of other complaints than those above mentioned, I shall consider them by themselves; which seems to be a more rational plan, than adhering to a term obscure in itself, and indicative of a disease not well defined, which, therefore, may tend only to mislead the reader.

DISORDERS *arising from* COSTIVENESS *and*
WIND.

IT has been remarked, that it has been the practice with ancient writers, when conciseness and accuracy were not so much considered

considered as in the present day, to treat of costiveness and wind as distinct heads of complaint; and for the reasons aforementioned, as well as from this tract being calculated for general usefulness, it may not be altogether improper to comply with this custom.

COSTIVENESS is either constitutional, or accidental, which ought always to be distinguished, the former being oftentimes harmless; and, indeed, children of such a habit of body are frequently the most thriving. If the mother should be very constipated, her children generally are so; and such a disposition, (whilst they continue in health) ought not to be forcibly counteracted, though it will be prudent carefully to watch it. And this will be especially necessary, in the case of children who are subject to fits; fine lusty infants being often seized with violent convulsions, without any other apparent cause than a naturally costive state of the bowels, and as uniformly recovered from the fits, merely
by

by procuring stools, and breaking off the wind. And this disposition to fits has taken place long before the ordinary period of teething, and has continued till children have been a twelvemonth old; at which time the solids, and especially the nervous system, have appeared to get stronger. In such habits, a quarter of an ounce of manna, or the like quantity of the syrup of roses, may be put into any liquid, and as much of it given by tea-spoonsful, as shall open the belly. Or should these prove insufficient, a tea-spoonful of castor-oil*, may be taken two or three times a week: or from three to eight grains of senna-powder, or of the extract of senna, with, or without a dust of grated nutmeg, or

* Castor-oil may be rendered very acceptable to children, if rubbed down with mucilage of gum arabic, and a little manna, and afterwards made into a draught or mixture, adding a little dill, or rose-water, with a few drops also of the compound spirit of ammonia, where such a warm ingredient may be proper.

cloves :

cloves: or from five to ten drops of the compound tincture of aloes, to infants of some months old. But rhubarb will not be a fit purgative, though it be joined with magnesia, which will not sufficiently counteract its restringency; howsoever proper in certain cases. Another reason for objecting to this compound, is that of its being the almost constant prescription of nurses, during the month, whose indiscriminate use of it is sometimes prejudicial; rhubarb, or magnesia, alone, as the child is naturally costive, or otherwise, generally answering all the purpose intended, especially for very young infants; whilst the union makes an unnecessary addition to the bulk of the medicine, which should always be avoided. A few grains of magnesia in a spoonful of dill, or common water, and sweetened with a little manna, or syrup of roses, forms a much neater medicine, (which may be quickened and warmed, where necessary, by a few drops of tincture of fenna) and in costive habits,

habits, which usually abound with acidity, answers very well in early infancy.

BUT if the child be otherwise in health, it has been said, it is, in general, inadvisable to do much to counteract the natural habit of body* : I have formerly, even during the month, directed manna, to the dose of half an ounce at a time, to very little purpose, unless it was almost daily repeated, and have at other times given from three to five grains of jalap; till I learned, that there are some

* I have attended in a family of numerous children, all of whom grew up strong and healthy, but were uncommonly costive, and from their infancy were often several days without a motion; nor would any gentle means procure it statedly. And on the very day that this note was added, I was consulted for an infant of only three weeks old, who had had no stool for five days, and yet was perfectly healthy and easy. This is not mentioned, indeed, to lead parents to abate of their attentions to a costive habit of body in their infants, but in proof only of its being, in some instances, innoxious, and therefore no cause of alarm as long as children are otherwise perfectly well.

constitutions,

constitutions, even in infants, where the bowels cannot be kept open without a daily exhibition of some purgative medicine, and that many such children are as well left to themselves, or at least, require only to be watched. On the other hand, it is a custom with many nurses, if an infant have not a motion by a certain hour of the day, constantly to administer some purgative medicine; and the body being accustomed to this stimulus, it is in a course of time rendered necessary. Whereas, upon waiting a few hours, a natural motion has taken place, as I have frequently experienced upon having prevailed on the nurse to wait for it. If a stool should be wanted, however, a suppository (or dry-clyster) made of a little slip of paper, or linen-cloth, twisted up, and well moistened with oil, may be very easily introduced, and will generally answer the purpose: or should this fail, a bit of Castile soap, mallow-root, or red beet, may be introduced in the like manner. These means will be assisted, and

a costive habit relieved, by rubbing the stomach and bowels frequently every day with a warm hand.

SHOULD such a costive and windy state of the bowels produce griping pains, which may be known by the drawing up of the legs, and a certain manner of crying, it will be proper to apply external warmth to the stomach and bowels, by means of heated bran, or chamomile flowers, put into a soft flannel-bag, which will both tend to abate the pain, and assist the operation of the laxative. Or should the costiveness be accidental, it must speedily be remedied; and if the occasion of it be an improper food, which is very often the case, the food must immediately be changed. If the child be not usually costive, rhubarb, it has been said, is often the best purgative, as it strengthens the bowels afterwards, infants being much more subject to an over-purging than to almost any other complaint, especially if brought up by hand. It sometimes happens, however,

ever, that much more powerful medicines than rhubarb may be required, whether the child be naturally costive, or not; and in such cases, much caution is necessary on the part of parents and nurses: for, where a proper dose of fenna-tea has proved ineffectual, it is surprizing what large doses even of rough purges have been given in vain, or sometimes to the injury of the child. On such occasions, I would rather advise a recourse to clysters, and especially those made of succotrine aloes. From three to twenty grains, (for children from the age of two weeks, to two years) dissolved in boiled milk, will rarely, if ever, fail of procuring a stool, and will often procure two or three, especially if preceded by the exhibition of a purge. But even rough clysters should be administered with caution, and ought not to be very often repeated, especially to very young children; though less hazardous, in every view, than the frequent repetition of purges of a similar kind, and when used

alternately become expedient and beneficial.

SOME writers, particularly among the *French*, have, much too frequently, advised oil of almonds to infants of such habits. Mr. LE FEBURE DE VILLEBRUNE therefore, in a note to the translation with which he honoured my first edition of the diseases of children, testifies his preference to oils; but I must beg leave, in turn, to differ from him, being persuaded, there are few disorders, besides those of the chest, in which any kind of expressed oil, but that of castor, will not be injurious to young infants, and particularly in affections of the first-passages. It may be doubted also, whether oil of almonds, or olives, always proves a laxative; or whether by diminishing the natural force and action of the bowels, it does not after a while prove the reverse.

As there is usually too much acidity in the first-passages in costive and windy habits, a little magnesia may be given for a
few

few days after the costiveness has been removed; and if the child be suckled, the nurse's diet must be attended to. If any flatulency should still remain, (which will not often be the case if it has arisen merely from constipation) a little dill-water, is a very safe and gentle carminative; or should one more powerful be expedient, the fluid parts of the warm opening mixture, directed in the chapter on Purging, may be given, without shaking up the vial. But if the flatulency be an attendant upon a lax state of the bowels and indigestion, its remedy will consist in the removal of those complaints, which will be noticed in their place.

It may be expected, however, that a word or two more should be said in regard to wind, which may likewise sometimes prove a real complaint, though it should not happen to be so confined as actually to become an occasion of fits. It is usually, indeed, but a mere symptom of some preceding or attending complaint; nor are its

troublesome effects either occasioned or increased by air taken in with the food, as many people have imagined : atmospheric air being essentially different from that produced by indigestion, whether owing to the weakness of the stomach, as it is called, or the improper quality or quantity of the food taken into it. It may however, in conjunction with other causes, prove a source of many complaints, and create watchfulness, startings, hiccoughs, vomitings, and even convulsions, if not timely attended to, especially if the infant be colic. A principal remedy in that case will consist in keeping the bowels open.

THE only instances that I remember to have met with of wind proving of much consequence, when not preceded by other complaints, have been in new-born and very lusty infants, whose mothers have also been peculiarly distressed by affections of that kind. This is, indeed, a somewhat anile way of speaking, but it states the precise fact; some instances of which have been

been very remarkable, and the symptoms uncommonly urgent.

WATCHING, *or* WANT *of* SLEEP.

THIS is frequently a symptom of the foregoing complaints, and in that case, may be removed by opening the belly, and afterwards administering some pleasant and carminative pearl-julep*; which will then

* This remedy has been so called from having been formerly composed of prepared pearls, and the name is here retained because familiar to many readers; but the pearls having no virtue peculiar to them, are very seldom made use of; the julep being now prepared from the common shell-powders, or testacea.—As this term (or testaceous powders) occurs very frequently in this work, it may not be amiss to observe, that testacea consist of prepared oyster-shells, crabs claws, crabs eyes, pearls, and red coral; which differ but little from each other. They are likewise denominated absorbents, in which latter class, are also ranked the prepared chalk, and magnesia; the former is more powerful and binding than any of the testacea, and the latter is, on the other hand, moderately opening.—Of either of them, from three to ten grains may be given at a dose, three or four times a day.

frequently act like an opiate, by restoring rest. Sometimes, indeed, this has succeeded so well, when given in large doses, that I have been suspected of having really given some sleeping medicine; which would in these cases prove exceedingly hurtful, as the watchfulness is generally a mere symptom, and not a disease; though when very obstinate, it is sometimes the harbinger of epilepsy, and then requires purgative medicines. I cannot, therefore, avoid taking notice in this place, of the destructive custom amongst wet-nurses, of giving opiates, in one form or other; which, however useful on proper occasions, are sure to act as a poison, and sometimes not a very slow one, when injudiciously administered, and never can be more so, than in a costive state of the bowels. A good writer* on this occasion observes, that

* Dr. A. HUME on the Diseases of Children, 1776; a writer in whom there is very much to be commended, considering the time in which he wrote, yet it is to be

that by an injudicious use of GODFREY'S cordial, and other opiates, "thousands, nay, ten thousands of infants have been destroyed."

WATCHINGS may arise from worms, purging, or gripings, whether from acrid breast-milk, or other food, and from indigestion, as well as from every thing capable of producing pain; each of which probable causes should be very attentively inquired into before we prescribe for the complaint, and will therefore be distinctly considered in their proper place. The usual source may, indeed, be said to be some default in the first-passages, and in very young infants is frequently owing to costiveness. I shall only observe further, if watchfulness be confined only to the night, it is probable the child sleeps too

be observed, that the doctor himself prescribes both opiates and astringents too liberally, and without a proper distinction of age, especially as he writes expressly for the direction of parents and nurses.

long

long in the day-time, which may be remedied by keeping it moving, and playing with it throughout the day; of which little matters further notice will be taken in a third volume, devoted to the *Management of Infants*.

THRUSH.

HAVING considered these slighter early complaints, I proceed to others which equally owe their origin to some affection of the alimentary canal, (or first-passages) and are oftentimes of a more serious nature.

ONE of the most important of these disorders, is the Thrush, a complaint that, probably, depends not a little upon the different natural habits of infants, as well as upon their management, particularly in regard to food, air, and the state of their bowels. This seems to be the case, inasmuch as the thrush is sometimes found to
seize

seize every infant in certain families, in whatever way the children may be managed; as well as to occur occasionally in others, upon a want of proper attention to the state of the alimentary canal, where a great number of other children, properly watched, have uniformly escaped it. Instances of the latter kind may have been noticed, where the mother happening to be ill, the whole attention of the family has been thereby engaged; or, where one infant has been put out to nurse, whilst all the rest of the children have been carefully brought up at home.

It is amongst the vulgar errors, however, that the thrush is a very harmless complaint, or is even desirable to a child in the month; for it is said, if it does not then make its appearance, it certainly will at a more advanced age, and will then prove fatal, or at least, attend patients in their last illness. The fact is, it is a disease of debility, and therefore attacks very young, and very old subjects, especially if

if otherwise weakened. From the above mistake, however, the disorder is often neglected in the beginning, whereby the acidity in the first-passages is suffered to increase, which always aggravates the complaint. It is, indeed, a much milder disorder in this island than on most parts of the Continent, (though we might, perhaps, suppose it would be otherwise) particularly in *France*, where it reigns as a malignant epidemic, especially in the *Hôtel Dieu* and *Foundling Hospitals*, known by the names of *Muguet* and *Millet*. The thrush, however, is as much a disease, as any other complaint that appears in the month, and is connected with most of the foregoing; a proper attention to which, it has been suggested, may very frequently prevent it.—As a general observation, it may be said, that when the thrush attacks robust infants of a costive habit of body, it is easily cured, and, indeed, requires nothing more than to keep the bowels well open; for which purpose, the daily exhibition

bition of castor-oil is usually the fittest mean. On the other hand, the complaint is attended with some hazard in delicate infants, whose bowels have been previously weak, and especially where the child is nourished only by the spoon.

THIS disorder is so well known, as scarcely to require any description, and generally appears first in the angles of the lips, and then on the tongue and cheeks, in the form of little white specks. These increasing in number and size, run together more or less, according to the degree of malignity, and compose a thin, white crust, which at length lines the whole inside of the mouth, from the lips even to the gullet, and is said to extend into the stomach, and through the whole length of the bowels; producing also a redness about the bottom. When the crust falls off, it is frequently succeeded by others of a darker colour: But this is true only in the worst kind of thrush, for there is a milder sort, that is spread thinly over the lips and tongue, which

which returns a great many times, and always lasts for several weeks. I have seen this so very often the case, that when I observe a child to have the complaint very slightly, and that it does not increase after two or three days, I venture to pronounce it likely to continue a long time, but that it will be of no consequence. Care, however, ought to be taken that the child be not exposed to cold.—It is an old observation, and there is some foundation for it, that very long sleeping in the course of the first week or two, is often a forerunner of this complaint.

THE thrush, in its commencement, is said to be generally attended with fever; but those who have been of this opinion, do not seem to me to have made what is a very necessary distinction, since I have, by no means, found this to be the case where the thrush is an original disease; though the mouth is often so much heated as to excoriate the nipples of the nurse, and becomes so tender, that the child is often
observed

observed to suck with reluctance and caution. In very bad kinds of thrush, it has been hinted, a fever may attend; but even here it does not appear at the commencement of the complaint, but rather towards the close; the fever also being of the low kind. And this is owing to the general ill health induced by the morbid state of the stomach juices and alimentary canal, in the same manner as the common hectic fever is induced by the long continuance of other bowel complaints.

It has long been a received opinion, that the thrush must appear at the bottom, and many old nurses will not allow it to be cured if it does not; and for the like reason, they always suppose it to be going off when this redness takes place. But the truth is, that its appearance there is only a mark of the degree of the disease, or of the acidity that occasions it, and not in the least of its cure; and is not, therefore, generally to be wished for. The redness about this part is occasioned by the sharpness

ness of the secretions in the bowels, and consequently of the stools, which slightly inflame and sometimes excoriate the bottom, and in a bad thrush will do so long before the complaint is going off; but in the lighter kind, no such effects are produced, or are, at least, very slight. And, indeed, this redness has been so often mentioned to me as an indication that infants must, unobserved, have already had a slight thrush, or, according to others, be likely to suffer by it very soon, where children have, nevertheless, escaped it altogether; that I have ventured to imagine such infants may be least of all liable to it, if otherwise in good health, at least, my experience seems to support that idea. And I have even conceived, that the acidity of the first-passages being in some children more confined, may prove a remote cause of such infants being troubled with the thrush; whilst others by an open belly, and stronger habit, may escape it, at the expence only of this foreness of the external parts,

parts, (from the sharp matters passing off) which often continues for several days. And this has led some people, on the other hand, to call this simple redness, the thrush, and we therefore often hear it said, that children have had it only in this part.

A PRINCIPAL remote CAUSE of this disease, seems to be indigestion, whether occasioned by bad milk, or other unwholesome food, or by the weakness of the stomach.—Perhaps thick victuals, particularly if taken hot, and made very sweet; also covering the face of the child when it sleeps, or its breathing the confined air of the mother's bed, may be amongst these causes, and ought therefore to be avoided. The more immediate cause, is the thickness, or acrimony of the juices secreted from the glands of the mouth, stomach, &c. producing heat and soreness, in these parts.—A tea-spoonful of cold water given every morning has been thought a good preventive: but keeping the bowels duly open, is certainly a much better.

FOR the CURE of this disease, much has been said in favour of emetics, especially wine of antimony, as being almost a specific, but I cannot say it has proved so with me; nor can I see any sufficient cause for departing from the more ancient practice, in the treatment of this very common complaint.

THERE can be no objection, after having properly opened the bowels, to administering an emetic; and where the thrush is of a dark colour, and the whole inside of the cheeks is lined with it, I am persuaded, it may be useful, by emptying the stomach of the crude juices oozing into it from the glands of this part. But I think it would be almost as endless, as it would generally be prejudicial, to persevere in the use of emetics, for days, and even weeks together, and is both a severe, and an unnatural method of treating a tender infant, in which the bowels are always the most natural outlet for its complaints; on which, therefore, nature uniformly throws the offending

fending matter on almost every occasion, as appears plainly in teething, in which the first-passages cannot be primarily affected. Should the antimonial wine, indeed, be deemed useful otherwise than as an emetic, or purgative, and by any alterative virtues be capable of removing certain morbid actions of the glands seated in the first-passages, a recourse to it would certainly be rational; but I have myself had no such evidence.

I BELIEVE, therefore, that where there is no fever, nor any uncommon symptom, testaceous powders are the best and safest remedy; which may be joined with a little magnesia, if the body be costive; or if in the other extreme, and the child is very weakly, two or three grains of the compound powder of contrayerva in its stead. Some such preparation should be administered for three or four days successively, and afterwards something more purgative, to carry down the scales as they fall off from the parts. For this purpose, rhubarb

is generally the best; but when the thrush is very violent, is of a dark colour, has come on very rapidly, and the child is lusty and strong, a grain or two of the powder of scammony with calomel*, may be joined with it; but this must be given with caution. After the purgative, the testaceous powders should be repeated for two or three days as before, till the disorder begins to give way. Afterwards, a teaspoonful of chamomile-tea, or a few drops of the compound tincture of gentian, well diluted, may be given two or three times a day with advantage; and the bowels be always kept open. On the other hand, when an infant with this bad thrush is weak and delicate, a decoction of the bark

* A very good method of administering this powder, is in the form of a pill, which may be broken into small pieces, and given mixed up with the child's food; by which means, they will not be left at the bottom of the spoon, as is sometimes the case when heavy ingredients are administered as a powder.

with

with the aromatic confection is found the best remedy.

THE choice of the testaceous powders, on which some writers have said so much, is, I believe, of very little importance: the purest and softest are preferable. The design of these medicines, being to absorb and correct the predominant acidity, their effect will be discovered from the kind of stools that succeed, and the dose may therefore be increased or diminished, or they may be altogether discontinued, as circumstances direct. In the mean time, if the child is suckled, the nurse's diet should be attended to, and in general, her usual quantity of porter or ale, (which is almost always more than sufficient) should be diminished.

IN regard to applications to the part, it is necessary to observe, that as they have little to do in curing the complaint, it will be improper to have recourse to them very early. I know, indeed, it is very common to begin with them, but they

serve only to increase the forenefs of the parts, (efpecially in the manner they are generally ufed) and to give a deceitful appearance of amendment. The proper intention of thefe remedies, at this period, is merely to preferve the infant's mouth clean and comfortable, and to prevent as much as may be, any pain or injury to the wet-nurfe. If therefore the infide of the cheeks and tongue are covered with thick floughs, or foulnefs, it may be convenient to clean the mouth once or twice a day; but it will in general be improper, till the complaint is paff the height, the floughs difpofed to fall off, and the parts underneath inclined to heal; which never takes place till the fecretions in the firft-paffages are become bland and mild. Proper applications will then have their ufe, not only by keeping the mouth clean, but by constricting and healing the raw, and tender apertures of the veffels.

OF thefe a variety have been in ufe, in the form of lotions and gargles, which from
the

the earliest times have all been of an astringent nature. Borax is certainly one of the best, which some advise to be mixed up with sugar, in the proportion of one part of the former to seven of the latter: a pinch of this put upon the child's tongue will be licked to all parts of the mouth. But I prefer a mixture of borax and common honey, (about two scruples, or a dram of the former to an ounce of the latter), which hangs about the mouth better than in the form of powder. Either of these may, at this period, be made use of as often in the day as shall be necessary to keep the parts clean, which they will effectually do, without putting the infant to pain, by being forcibly rubbed on. I must own, I have frequently been distressed, at seeing nurses rub the mouth of a little infant, with a rag-mop, as they term it, till they have made it bleed; and this operation they will often repeat half a dozen times in a day.

It only remains to take notice of the black thrush, as it is called, which is con-

feffedly a very uncommon complaint in the infant ftate. The late Dr. ARMSTRONG faid he had never met with it among the great number of children brought to his difpenfary. I have feen only two inftances of any thing like it, which were in ftong and healthy children; but the parts were not perfectly black, and if that be intended by the name, thefe cafes might not be precifely that complaint; they, however, both proved fatal. After the ftomach and bowels have been cleaned, I believe a decoction of the bark, with the aromatic confectiion, as before mentioned, is the moft likely medicine to be of fervice. In fuch cafes, the bark fhould be adminiftered very freely, and the bowels be kept open; which is more fafely done by rhubarb, than any other purge.

GANGRENOUS, *or* PUTRID THRUSH.

THIS is a very different difeafe from the foregoing, and attacks children at a much
later

later period; seldom before they are two years old, or later than nine or ten, unless by infection. The eruption does not seem to be the consequence of any preceding general disease, and is the cause rather than the effect of those febrile symptoms that accompany it.

Its first appearance is marked by a very spongy state of the gums, and a remarkable tenderness of the inside of the cheeks and mouth; soon after this, little ulcerations, having a dark-coloured surface, appear upon the gums, the inside of the lips, and upon the tongue: sometimes similar ulcers are seen at the back parts of the mouth, but this is not always the case. As the disease proceeds, the cheeks become slightly swelled, and are very tender when touched; and there is often an unusual redness upon that portion of the skin which covers the lower jaw. Besides the thrush-like appearance upon the tongue, that part is usually very much furred, and the teeth about the edges of the gums are likewise covered

covered with a blackish fur; the breath is very offensive, and at this period the disease is highly infectious, even to adults. In the progress of this complaint, the glands under the chin become enlarged and slightly painful; and there is generally a preternatural flux of spittle, which is sometimes discharged in considerable quantities from the beginning of the attack: sometimes, though rarely, the angles of the mouth are ulcerated.

THE gangrenous thrush is always accompanied with a considerable languor, and sense of debility; the appetite is impaired; but children do not sleep ill, and they are often cheerful and active, at different parts of the day.

THE disease does not observe any exact periods; some children recovering in a fortnight, while others have been more or less affected from a month to six weeks.

FORMIDABLE as the appearance of this disease may be, it does not seem to be very dangerous, if properly treated; and the
remedies

remedies are obvious. A table spoonful, or more, (according to the age of the child) of the infusion of Cascarella bark, warmed with HUXHAM's tincture of the Peruvian bark, exhibited three or four times a day; and the parts frequently washed with the decoction of bark, rendered as sharp with the diluted vitriolic acid, as children can bear it, having hitherto proved sufficient to cure this complaint, at one or other of the periods above mentioned.

ERUPTIONS *on the* SKIN.

IT is, by no means, my intention to enter largely into this extensive subject, but imperfectly understood, perhaps, even to this day, at least in regard to the order and class of the several eruptions; though as far as it respects children, sufficiently plain for every practical use. In another part of the work I shall treat of the scall'd-head, and two or three other troublesome affections of the skin,

skin, but shall at present chiefly confine myself to eruptions peculiar to infancy; adverting first of all, to such as are connected with the state of the first-passages. The earliest of these, is

The RED-GUM, or BENIGN-ERUPTION.

THIS is an efflorescence appearing usually in small spots, often confined to the face and neck; but at others, it extends to the hands and legs, and even the whole body, appearing in very large patches, and sometimes raised above the surface. It will likewise appear in the form of small pustules, which are filled with a limpid, or sometimes a purulent, or yellow liquor, and frequently turn dry and horny, and scale off; at least, I have never known what name to give this kind of eruption, but that of a *rank* red-gum, as it happens only in the month, or soon afterwards, and never gives any trouble. There is another species

species as small as pins heads, or even their points; firmer than the former; often of a pearl colour, and opake, which has generally been accounted a kind of red-gum; but it has of late been suggested, might for distinction sake, be termed the *white-gum*. Every species of this eruption, like the thrush, is the effect of a predominant acid, but can scarcely be termed a complaint, being a kindly exertion of nature to throw off some acrimony; consequently an evidence of the strength of the constitution, as the thrush is, usually, of its weakness. In the former, nature throws off the offending matter on the surface more completely than in the latter, and therefore, when the eruption is slight, requires no assistance.

On this account it is, I apprehend, that writers have not usually taken notice of it, though it should seem requisite, if only for the satisfaction of some parents, who are much distressed on account of it, especially if it be of the more extensive and rank species. In general, it is necessary
only

only to give a little testaceous powder, or magnesia, according to the state of the bowels, and to keep the child moderately warm; otherwise the rash striking in, the acrimony will fall on the first-passages, and be succeeded by sickness, or purging, (till the eruption appears again on the skin) or not unfrequently by the thrush, or a slight return of it, if the child has lately recovered from it. In the case of sickness at the stomach, or any disposition to fits, upon this eruption being expelled, some light cordial, such as three or four drops of the compound spirit of ammonia, should be given three or four times a day, and the child's feet, or perhaps the whole body, be put into warm water. The state of the skin, and the bowels have a peculiar consent; and on this account, infants whose first-passages have been frequently disordered, are always benefited by eruptions on the skin; and in such, peculiar care is necessary to guard against their being repelled, as well as to invite their return.

INFANTS

INFANTS are liable to various kinds of rash, both in the month, and till the period of teething is over. The early ones may be regarded as a sort of red-gum, and children who are most subject to them, generally have their bowels in a better state; the rash carrying off, as has been said, the acidity with which they so much abound.

It may be remarked, however, that when infants at the breast are inclined to frequent returns of some eruption, if the child be always indisposed at such seasons, the rash will often be found owing to some ill quality in the breast-milk, which ought therefore to be examined, and particularly in regard to its taste. On such occasions I have found, that milk which has been above a twelve month old, has contracted a *very unpleasant* flavour; and that upon changing the wet-nurse, a very ill looking rash has immediately abated, and has soon afterwards entirely disappeared, together with the other complaints.

ONE species of these early rashes often
takes

takes place about the time of teething, and not unfrequently at the decline of fevers or severe bowel complaints; infomuch that, upon a sudden appearance of it during a serious illness, I have often ventured to prognosticate the recovery. This rash very much resembles the itch, both in regard to the little watery heads, and foul blotches; and is confined to no particular part of the body, though it appears more frequently about the face and neck. Indeed, I have seen the whole body so covered with it (mixed with an eruption about the face, of a different appearance, and evidently red-gum) that in a consultation, it has been by some taken to be the true itch. This eruption is certainly salutary, and even critical, requires nothing but to avoid taking cold, and is mentioned only because it is not uncommon, and parents who are unacquainted with it, may from its suspicious appearance, very well be alarmed at it.

BUT there is a very common rash that
calls

calls for more attention, and to which medical writers have given the name of Crusta-Lactea, or milk-blotches, which has a very unpleasant appearance, but is, notwithstanding, equally innocent with the former, and even prevents other complaints. I think I never saw an infant much loaded with it, but it has always been healthy, and cut its teeth remarkably well. Indeed, it falls to the lot of the finest children, and such as are well nourished; whence some have imagined it owing only to the richness of the milk. And it is remarkable in this eruption, that howsoever thick and long-continued the scabs may be, the crusta-lactea never excoriates, nor leaves any scar on the parts. It may, possibly, be different in some other climates, though I cannot guess for what reason it should be so on the Continent: it is insisted upon, however, by one or more writers, as well as, that children long affected with it become unhealthy.

MILK-BLOTCHES appear first on the fore-
VOL. I. H head,

head, and sometimes on the scalp, often extend half-way over the face in the form of large loose scabs, which as the disorder increases, appear not very unlike the small-pox after they are turned. It begins with white vesicles, larger than the itch, which, soon become of a dark colour, to which succeed the scabs, with a watery discharge, and great itching of the affected parts, sometimes covering the head, and it is, very improperly, said by some, the whole body. It is also said to degenerate into the scall'd head; but I have never seen any thing like that complaint in young infants.

VERY little, I believe, is necessary to be done; but in bad cases a perpetual blister is sometimes of service; and, moreover, usually answers the good purpose of abating the itching, which in some instances is exceedingly great: to this end, however, the repetition of a blister, where needful, is preferable to keeping one constantly open. If the urine becomes turbid,
or

or fetid, it is thought the rash will be of short duration. At any rate, it usually disappears of itself when the child has cut three or four teeth, though it may sometimes continue for several months, and in a very few instances even for years: in such cases, the *Harrowgate*, or any other sulphureous water will have a good effect; but the shop-medicines commonly prescribed do nothing. I have known testaceous powders and various alteratives administered to no purpose, as most people are very anxious to have it removed, if it be possible. This rash will now and then make its appearance very early, and has then been mistaken by those who are not much accustomed to very young children, for the effects of the venereal disease. It has been said, that it usually dies off upon cutting some teeth; and I have known it disappear suddenly, previously to any teeth being cut, and after some weeks become more violent than ever; infants remaining all the while in perfect health.

It were almost endless to enumerate the various kinds of rash to which infants are liable, but I mean chiefly to confine my remarks to the more important, or rare ones, and such as may not have been described by preceding writers. Among such are the following, whose unusual appearance is apt to alarm parents, and others not accustomed to see them.

THE first I shall notice appears chiefly in teething children, very much resembles the measles, and has been sometimes mistaken for it. It is preceded by sickness at the stomach, but is attended with very little fever; though the rash continues very florid for three days, like the measles, but does not dry off in the manner of that disease. It requires nothing more than the shell-powders, or sometimes the addition of a little nitre and compound powder of contrayerva; with a dose or two of rhubarb, or other gentle laxative, on the going off of the rash.

At this period, especially whilst the
double

double or eye-teeth are cutting, I have noticed a rash which at its first appearance is very similar to the above, and has likewise been mistaken for the measles. It, however, soon spreads into larger spots and patches of a bright red, and afterwards of a darker hue, resembling the purple spots which appear in bad fevers; but is, nevertheless, of a benign nature. It is, indeed, attended with some fever, arising, possibly, from the irritation occasioned by teething, and has been followed by small and hard round tumours, or lumps, on the legs, which softening in two or three days, always appear as if they would suppurate, though I believe they never do; as will be further noticed in a similar appearance of boils, under the head of fever.

THE treatment, like that of other rashes at this period, is very simple, requiring little more than an attention to the state of the bowels, or, perhaps, a few grains of the compound powder of contrayerva, unless the fever be considerable; which must

then be treated according to the directions given under the different heads of fever, and teething. Should the lumps succeeding the rash not begin to die away in three or four days, a decoction of the bark will be found useful, when the tooth-fever may not forbid a recourse to it.

I HAVE twice lately seen a third kind of rash, in appearance resembling the measles, and like it covering the whole body, but with larger intermediate patches like the eruption in the scarlet fever; which is mentioned more for its uncommonness, which might render it alarming, than for its being in itself dangerous, or important. It was, however, in both instances, preceded by sickness, by purging, pain, and a little fever; the whole subsiding upon the appearance of the rash, which therefore seemed to be critical, or at least, like some other eruptions, consecutive to the approaching return of health.

AN eruption still less frequently met with appears after children have cut all their
first

first teeth. I know not what name ought to be given to this kind of eruption, which breaks out in the form of round lumps, as large as middling-sized peas, very hard, with a very red base, and white at the top, as if they contained a little lymph.

THEY come out suddenly without previous sickness at the stomach, are not sore, disposed to itch, nor ever give any trouble, and are seldom seen but on parts that are usually uncovered, and are sometimes there in great numbers, resembling the distinct small-pox; but are harder, more inflamed, and less purulent.

ALARMING, as well as unusual, as this appearance may be, I believe the eruption is always perfectly harmless, if not repelled by cold, or improper treatment; and will dry away in three or four days: nothing more being necessary than the little remedies, directed for the former, and to keep the child within doors, if the weather be cold.

AN eruption of an appearance equally

uncommon, and analogous to the above, I have met with only in children of at least three or four years of age, and such as have also been affected with slight symptoms of scrofula; though I have not seen it frequently enough to ascertain its being, in any degree, owing to that specific humour. It breaks out suddenly, covering at once the greater part of the body, but occasioning neither pain nor itching, nor are children sick at the stomach nor otherwise ill with it, though it lasts for two or three weeks.

THIS eruption, therefore, like some others, is taken notice of chiefly for its singular appearance, which, though somewhat like the nettle-rash, is of a different figure, but may be pretty exactly conceived by the little red lumps sometimes left by the small-pox, after they are turned, and also rubbed, or picked off, especially after the chrystalline or warty species, and where the pustules have been pretty numerous.

IF the first-passages are at all disturbed,
my

my attention is principally directed to them, otherwise to the state of the skin; and in this case, I have usually directed small doses of Dr. JAMES's powder, to be taken for a few nights at going to bed, and the polychrest salt and rhubarb, occasionally, in the course of the day, with, or without, the addition of half a tea-spoonful of the acetated water of ammonia.

IN the course of a few days the eruption puts on a darker colour, is less prominent, and begins to scale off in a branny scurf, somewhat like the measles: but should no such change take place, the antimonial wine should be taken two or three times a day; to which, if no amendment should soon be perceived, a few drops of the tincture of Spanish-flies may be added; a remedy often very efficacious in disorders of the skin, but should be administered with caution, and only under the eye of some professional man.

AN eruption with every appearance of the nettle-rash sometimes occurs in children,

dren, and more generally under two years of age, and is exceedingly troublesome to the infant, as well as matter of surprise to parents, from the suddenness of its appearance. Children going to bed perfectly well, wake very uneasy, and frequently continue screaming, for some time, before the cause is discovered; when upon examining the body, and the lower limbs, they are found covered with large wales, resembling those arising from the sting of nettles.

THE nettle-rash is, perhaps, the slightest of all fevers, though its accession is sometimes preceded by sickness at the stomach, and pain in the head, especially when the consequence of sudden exposure to a very cold wind in robust youths.

No kind of nettle-rash during infancy, is of the importance that it sometimes is in adults; and only where it may happen to continue a very long time can demand particular notice. The species now under consideration requires less than any other,
and,

and, indeed, often disappears in a few hours. When it continues longer, a few grains of the compound powder of contrayerva, or other of the milder absorbent powders, with, or without two or three drops of the compound spirit of ammonia, may be given two or three times a day, and the bowels kept open.

THIS is, probably, a milder species of the nettle-rash. When the body is more covered with it, and it continues long, a little more care is required to prevent its being repelled; and if it should, the tepid bath, and light cordials should be had recourse to, to procure its return to the surface; which is always of the greatest consequence, if the child should continue unwell.

AMONGST rashes attended with some little fever, there are various that have acquired no name, and one resembling both the above, and the scarlet fever, but without the marked symptoms of the latter, or drying off in branny scales in the usual manner

manner of that eruption. The figure and colour of the rash, and degree of fever, however, are more of that kind than of the nettle-rash.

ANOTHER rash, or rather eruption, takes place both in bowel complaints and in teething, and always appears to be beneficial. The antients have termed it phlyctæne, but modern writers have not noticed it. It consists of vesications or blisters, of different sizes, resembling little scalds or burns, and continues for several days. They come out in different parts, but chiefly on the belly, ribs, and thighs; and contain a sharp lymph, which it may be prudent to let out by a puncture with a needle, especially from the larger ones. No medicine is necessary but such as the particular state of the bowels may call for, which usually abound with acidity whenever there is much eruption on the skin.

AN eruption, vulgarly termed scorbutic, infesting the face and neck, and discharging a sharp ichor that excoriates wherever
it

it runs, and difficult of cure by chemical alteratives, will often yield in a short time to the expressed juice of the water-parsnip. From one, to four or five table spoonsfull may be given, mixed with one or more spoonsfull of new milk, three times a day, according to the child's age, and the state of its stomach; taking care, at the same time, to keep the bowels open by fenna-tea, or other common laxative.

I HAVE several times met with an eruption, resembling what is called the Grocer's-itch; whether depending at all upon the weather, it is difficult to say; but it is remarkable, that I have seen it chiefly during a cold season, and have then usually met with three or four children affected with it about the same time. It often begins about the arms and thighs, but always extends soon afterwards to other parts, and frequently spreads quite from the head to the feet.

It appears in some parts in very small eruptions like the points of pins, with
watery

watery heads, and in other parts, as large as peas, and sometimes in foul blotches, which after breaking, form sores, and broad, ugly scabs. These die away, and the like appear, successively, in other parts, sometimes for two or three months, leaving the skin of a dirty, adust hue. In other parts, the eruption is in the form of small, hardened pimples, which do not break, nor are at all sore to the touch.

THIS eruption appears alike in children who have cut all their first teeth, and in infants at the breast; though I have happened to see it, I think, more frequently in teething children, and it then seems to be connected with dentition. And this has appeared pretty evident from children who had taken a variety of medicines, and continued to break out in fresh places, suddenly getting rid of the eruption altogether upon my lancing the gums, and three or four teeth in consequence coming through.

WHEN this eruption has appeared in infants

fants at the breast, I have several times known the suckling mother or nurse, in a few weeks afterwards break out in like manner with the child; but whether by accident, or from contagion from one to the other, I have not been able to ascertain.

If neglected, the eruption is of long continuance, and proves very distressing to parents, having even caused a suspicion to rest on the wet-nurse; the eruption being sometimes suspected to be the itch, and at others, venereal; which it certainly is not.

It has been always benefited for a while by washing the parts with two drams of the pure water of kali in a pint of soft water; which I would always recommend, though it will not alone effect a cure. Various internal remedies also, which remove other eruptions, have generally failed in this, such as the quicksilver with chalk, and quicksilver with sulphur, given in large doses; as also the water-parsnip. The external application, however, of an ointment consisting of the sulphur ointment,
and

and ointment of nitrated quicksilver, with a greater or less proportion of the latter, has hitherto never failed me, together with the internal exhibition of one or other of the forementioned remedies.—In some of the more obstinate eruptions, and particularly in this, I have noticed a spontaneous purging take place upon the decline of the rash, and I have always accounted it a good sign; having never observed the child to be weakened by the purging, though it has continued excessive for two or three weeks.

I SHALL close this account with the description of an eruption that is singular enough, resembling very much the broad ring-worm, or the adust-coloured spots left on the face after an attack of St. Anthony's fire. I have seen it in various parts, but I think only on such as are more or less liable to be fretted by some part of the infant's dress, especially on the bottom, and contiguous parts covered by the cloths; where the blotches are always the broadest and

and most rank. Were it to appear no where else, it would seem to be occasioned by some sharpness of the urine and stools, as the skin has a very heated appearance, though the eruption, I believe, is not at all painful. It frequently breaks out before the period of teething, but the bowels are generally somewhat disordered, and the stools voided very green, or else become so very soon afterwards. This I take to be one of those eruptions occasioned by some bad quality of the breast-milk, as, I think, I have never met with it but in young infants whose nurses milk has been old, and has also contracted a very disagreeable taste. If that should not be the case, the rash will probably require nothing but the light absorbent medicines before mentioned, and to guard against costiveness. But if these means should not succeed in a short time, the nurse ought to be changed, lest some worse consequence should ensue, as will be noticed under the head of convulsions.

IN all the eruptive complaints of infants, taking cold ought to be carefully avoided, and great caution be used in regard to all external applications, as well as keeping the belly open. If the child is sick at the stomach, a little magnesia, or testaceous powder, with, or without, the addition of the compound powder of contrayerva, may be given now and then, as was noticed under the article of red-gum: or should the rash be hastily struck in, and the child be ill, it should be immediately put into a warm-bath, and afterwards take five or six grains of the aromatic confection, with, or without a few drops of the wine of antimony, or of the compound spirit of ammonia, in simple mint-water. Whenever any the least indisposition takes place upon the sudden disappearance of a rash, immediate attention should be paid to it. I have known such retrocession, in a previously healthy child of only six months old, followed not only by vomiting and purging, but by a rapid decline; the lungs
being

being as replete with tubercles, as I have ever known them to be at a more advanced age. Instances of so great marks of disease, however, have occurred to me only in families inclined to scrofulous, or hectic affections.

SHOULD any scabs become very dry and hard, which the milk-blotches, for example, will sometimes be, especially when they extend to the crown of the head, and seem to give pain, they may be touched with a little cream, or with oil of almonds mixed with a few drops of the water of kali; but not a large surface at a time. Or should they be very moist, and cause pain by sticking to the cap, they may be dusted with a little common powder, or with flowers of sulphur, and covered with a singed rag; but I should be very cautious of doing much more with drying applications, for the reasons above mentioned, especially during the time of teething.

SORE EARS.

SLIGHT blisters and ulcerations behind the ears of infants are so very common, that almost every parent is well acquainted with them, and in general require only to be washed with cold water, or covered with a fingered rag, to keep the cap from sticking to them, and thereby giving the child pain. They are, moreover, very often beneficial, especially during bowel complaints, or the eruption of the teeth; and will sometimes get well and break out again into very foul sores, several times, without any cause for alarm. But there is in some children of a gross habit of body, and especially about the time of teething, a species of ulcer that often requires attention, on account of its extending low down in the neck, occasioning great pain, and spreading into large and deep sores, in so much that a mortification has sometimes come on, and even

even the bone has become diseased. Here fomentations will be necessary, especially those of bark; and its powder should be administered internally. Such cases, however, do not often occur; but whenever the sores are large and painful, fomentations of white poppy heads boiled in milk, will be beneficial. If such ulcers are very foul, the cure should be begun by a blister on the back, in order to draw off the heated serum that flows to the parts. Where the bark has not been indicated, I have usually given an opening powder of testacea and rhubarb, with a little nutmeg, or sometimes nitre, to which is added either calomel, cinnabar of antimony, or quicksilver with sulphur. But above all, if this species of ulcer be not soon disposed to heal after such treatment, some mercurial application should be made use of, which, though the sores are often apparently inflamed, never offends them. A very clean and elegant preparation of this kind is the following, which ought to be pretty fresh made,

and may be prepared by every apothecary in town or country:

Rx. Calomelan. ʒj and ʒij.

Ung. Sambuci ʒj m. ft. linimentum.

A little of this liniment spread on each side of a piece of doubled linen-cloth, and applied twice a day, will do more than all the fomentations, or healing ointments, that I have ever seen used; and indeed has always succeeded with me, though I have often been told, that the sores had spread deeper from day to day under various other applications. From such treatment I have never found the least ill effects, but children have preserved their health as well as if the sores had kept open; which, when benign, are certainly designed by nature as a preservative from some other complaints, especially those of the stomach and bowels, which will presently be noticed.

ABSCESS *within the* EAR.

IT is not uncommon to meet with fetid discharges from the internal ear, either
with,

with, or without inflammation, and external forenefs; but this is usually in children of one or more years old, rather than very young infants. If a little cooling phyfic, and wiping out the matter frequently, should not remove the complaint, cleansing injections should be used, and some one of the warm acoustics, directed for deafness*, be afterwards dropped into the ear. The child should also be made to lie, as much as may be, on the affected side, that the discharge may have a free vent.

SHOULD the quantity and fetid smell of the matter be increased, a blister should be kept open on the nape of the neck, a few purges of calomel be taken, and on the intermediate days, the powder of quicksilver with sulphur. But above all, in the worst cases, fumigations with the red sulphurated quicksilver, and quicksilver with sulphur, mixed together, should be made

* See Vol. 2.

use of morning and evening; from which I have seen the best effects when the discharge and fetid smell have been very great, and the ulcer of long standing.

VOMITING.

I COME now to the several disorders of the first-passages, which have been said to be so materially connected with eruptive complaints; and first, of those of the stomach.

VOMITING is certainly not a common complaint of infants, I mean when considered as a *disease*, unless it be attendant upon some other, of which it is then rather a symptom, or the consequence of such disease improperly treated. Neither are infants in health disposed to vomit frequently, unless the stomach is overloaded; the milk is then usually ejected as soon as it is taken, and comes up unchanged. Nor is this to be considered as a disease, or as calling for the discipline recommended by
some

some writers. Wherefore should the residue of the aliment be forced off the stomach by an emetic, when nature has already parted with all the oppressive abundance? This kind of puking is not attended with any violence to the stomach: the milk, or other food seems to come up without any sensible action of the part, or the child being sick. Nay, it is at once so common to some of the finest children, that it is a saying with some experienced nurses, that a puking child is a thriving child; and when such ejection comes only soon after sucking or feeding, and the aliment is cast up scarcely changed, matter of fact verifies the observation. I have even known clotted blood thrown up, without any apparent effort, in an infant under two days old, without the least ill effect. But if the food remains some time on the stomach, it will then be thrown up in a curdled state, which is an indication to attend to it, if it happens frequently. Not that the milk ought not to curdle on the stomach, which it always must,

must, in order to a due separation of its component parts, and is the chief, if not the only digestion, it undergoes in the stomach. The whey and the rich oil are there separated from the curdy and earthy particles, the former being taken up by the milky-vessels in the bowels, is converted into blood; whilst the bulk of the latter is carried down and expelled with the other excrementitious parts of the food, and glandular secretions, for which nature has no use. This curdling of the milk, therefore, is the natural course of digestion, though many writers have not been sufficiently attentive to it, and HARRIS has asserted, that it is owing to a predominant acid; implying, that an acid is the only cause of the separation; which it certainly is not. It may, indeed, occasion it to take place too suddenly, and give rise to various ill consequences; although such separation ought to be made, as the natural and proper effect of mixing duly with the stomach, or digestive juice. When infants, therefore,
not

not over-fed, throw up the milk uncurdled, after it has been some time in the stomach, it is always a worse sign. But when the milk comes up in a curdled state, it proves that the stomach having digested what it has received, hath not power to push it forward into the bowels, and therefore throws up a part of it*. If this be the case, the stomach may perhaps require to be emptied of its whole contents, which may then be easily done by giving a little warm water, or chamomile tea. The cause of the indigestion was an accidental repletion; that removed, together with the consequent foulness, or bad juices of the stomach, the effect also will generally cease, and unless the vomiting returns, from any further injury the repletion may have occasioned, it requires nothing more. To distress the

* I have known a child throw up a piece of curd full as large as the thumb of a grown person, and as firm as a piece of dough; and be perfectly well the next minute.

child, on every such occasion, with a sickening emetic, or drench it with rhubarb and magnesia, is as needless as it would be to awake a patient out of a sound sleep to give him an opiate. Only let the child fast a little after having emptied the stomach of its load, and the nurse be careful not to overfil it for the future, and it will rarely want any other assistance.

If the vomiting, on the other hand, has arisen from acrid diet, a little further discipline may be requisite, because some half-digested food has got into the bowels, perhaps for several days together. In this case, a gentle laxative, and change of food for one of a milder kind, is all that is generally necessary; or if there be a prevailing acidity in the stomach, either the testaceous powders, or magnesia, (according to the state of the bowels*) may be mixed with the food, or be otherwise administered

* See *Note* at page 71.

for two or three days, as the occasion may require. Or a drop or two of the water of kali, or a little Castile, or almond soap, are excellent remedies, especially when the stools are unusually green, or clayey; not only as they will tend to correct acidity*, but promote a secretion of the gall, as well as a generous warmth in the first-passages, and assist the digestion. Should the vomiting be a symptom attending some other disease, its remedy will turn on the proper treatment of its cause. Should it follow upon a suppression of discharge behind the ears, and more especially if consequent upon the use of drying applications, a return of the discharge should be solicited. Or if the cause be the sudden disappearance of

* It is well known, how small a quantity of soap put into a churn will prevent a due separation of the component parts of the milk, so as to allow very little, or no butter to be made; whereas, a little vinegar effects the separation almost instantaneously, and saves a vast deal of trouble.

some eruption on the skin, the child, it has been said, may be put into a tepid bath, the limbs be well rubbed as soon as it is taken out of the water, and the infant be then put to bed: and if the vomiting continues, an emetic should be given, and afterwards a blister, or warm plaister, applied to the pit of the stomach; or some light cordial be administered.

HAVING mentioned emetics, I shall take this occasion to observe, that the choice of them will be always best determined by the complaints for which they are administered. In those of the first-passages, ipecacuanha is generally the best, but if a fever should attend, or it be wished to promote a gentle perspiration, those of antimony are preferable; or lastly, in disorders of the breast, the oxymel, conserve, or tincture of squills.

BUT a more troublesome vomiting will sometimes arise in unhealthy children, from too great a sensibility, or too great an irritability of the nerves of the stomach.

Such

Such medicines are then indicated as will brace, or strengthen that organ, and abate its sensibility. For the former, a cold infusion of the bark, or of chamomile flowers, with orange-peel and ginger, and sometimes a little rhubarb: for the latter, a saline mixture with a drop or two of laudanum. And the benefit of these may be increased by aromatic and spirituous fomentations to the pit of the stomach, or by the labdanum plaister, with a little Venice treacle added to it.

LASTLY, a vomiting may arise from a strangulated rupture. When therefore, scarcely any thing is found to stay on the stomach, or all the above remedies fail to remove a frequent disposition to vomit, the parts where ruptures appear should be very carefully examined, and upon the least suspicious appearances being discovered, the assistance of the nearest surgeon be called for*.

* For further observations on this accident, see the Article of Ruptures, Vol. II.

INFLAMMATION *of the* STOMACH.

THIS is a disease very seldom met with, I believe, in this country, but is common in *France*, as appears by a paper read before the *Royal Society of Medicine*, in *Paris*, by Mr. SAILLANT; and is said to attack children of four or five years of age.

THE characteristic SYMPTOMS of this disease are, great pain in the region of the stomach, sometimes recurring every quarter of an hour; violent contortions of the child; and the application of a hand to the seat of the disease. Mr. SAILLANT in the first instance suspected these symptoms to be owing to worms, and prescribed accordingly; but the child dying in a few days, the stomach was discovered to be inflamed.

THE TREATMENT of this dreadful disease is, however, represented as very simple, consisting only in cooling and laxative remedies, which when administered in good time,

time, are said to be usually successful. For this purpose, Mr. SAILLANT has generally administered the juice of lettuce, by spoonfull, every hour. This was generally found to relieve the pains in a short time, and some infants who had been judged to be in a hopeless state, and even at the point of death, were perfectly recovered.

MR. ANDRY has done me the kindness of acquainting me, that he has sometimes met with this complaint, in the *hospice des enfans trouvés*. In the instances he has seen, the infants were found to vomit up every thing that was given them; which it is probable, must generally be the case where the stomach is actually inflamed. In this case, perhaps, fomentations, or a blister, to the stomach, and the use of a warm-bath, together with castor-oil, or other softening laxative, ought to be made trial of.

GRIPES.

THE Gripes is a very common term amongst nurses, and some writers on children's diseases have treated of it under a distinct head; but this serves to perplex matters, instead of explaining them. If a child be not hungry, nor hurt by some part of its dress, there will always be symptoms attending to account for its crying, and other expressions of pain. The cause is, indeed, very commonly in the bowels, and may be increased by costiveness and wind, which have already been treated of, but more commonly manifests itself by a purging, which comes next in order to be considered. I shall only previously observe, that children when very much griped, sometimes refuse taking the breast, though offered them repeatedly, when placed, in the usual manner, on the nurse's arm, but will take it, nevertheless, very readily if they

they are held, upright, before her.—The reason of this, perhaps, is, that the offensive and irritating matters in the stomach do not then press upon its upper orifice, which is exceedingly sensible, from its numerous nerves.

PURGING.

UNDER the article of vomiting it was observed, that frequent puking is oftentimes an attendant upon some other complaint, and then demands a peculiar attention, and is to be treated agreeably to the nature of such complaints; and there is, perhaps, none which it more frequently accompanies than a purging.

VOMITING and purging very often arise from unwholesome milk or other food, and from a moist cold air, as well as from the sudden disappearance of some eruption on the skin. The purging is not then hastily to be stopped, nor even absorbent powders

to be given, till the offensive matter be first carried off; and if a vomiting attend, the cure should begin by administering an emetic. But though the purging ought not to be checked without previous evacuations, nor to be stopped hastily, yet it is not to be treated with a daily exhibition of rhubarb, which, though a common practice with many, serves to keep up a purging after the cause has been removed, by creating a continual irritation in the bowels. Purging, indeed, is a complaint often as difficult to treat as any in the infant state, and is therefore worthy of particular attention. In a general way it may be said, that a sufficient dose or two of rhubarb should be administered in the beginning, and afterwards absorbents. If the purging should still continue, an emetic will be necessary, as purges do not always lie long enough in the stomach to carry off the offensive matter it contains. After this it is often necessary, that the child be purged again; for it should always be remembered, that

that many complaints of infants, whether seated only in the first-passages, or attended with fever, will frequently seem to be giving way upon procuring stools freely, but will soon return if the same means be not repeated, till the whole irritating matter be carried down. Should such repetition fail of success, though the diet has been carefully attended to, the use of them at present should be laid aside, and recourse be again had to absorbents, and if there be no fever, to light cordials, and even to opiates; without the latter of which, many bowel complaints will not admit of a lasting cure, owing to the great irritability of infants. Such medicines are not, indeed, very often required till children are some months old: but when they are found necessary, not only may syrup of white poppies, but even laudanum be given with the most perfect safety*; though from the time

* From the half of a drop, to two, or three drops, in the course of the day, will be a proper quantity for infants from a week old, to the age of six months.

of GALEN, (who cautions against giving Venice-treacle to children) till of late years, many physicians have been fearful of directing them, (arguing from their abuse against their use) and especially HARRIS, who in other respects, has written so well on their diseases. I remember being called to see an infant of only two days old, who, through a mistake, had taken some hours before, four drops of laudanum. The parents were greatly alarmed at the child's lying in a stupid, drowsy state, without being able to take the breast or open its eyes. I advised, however, only to get a little breast-milk down with a tea-spoon, and encouraged them to believe that the laudanum would do no kind of harm; the infant having no disorder for which that medicine was improper. Accordingly, though the child lay sleeping above six and thirty hours, it afterwards awoke perfectly well.—This is mentioned, however, only by way of encouragement to such as may be fearful of administering opiates even where

where they are necessary. They are, nevertheless, very powerful medicines, and should be prescribed with due caution for patients of every age, and especially for infants. A like caution may be necessary in regard to cordials, which are, nevertheless, in many cases equally proper, notwithstanding a modern prejudice against them. There is a certain coldness and languor in infants when they are ill, especially under some bowel complaints; and whenever they may be in that state, that class of medicines will have a very happy effect.

It is to be observed, however, that a purging is not always a disease. The bowels are the great natural, and critical outlet in infants, as the pores of the skin, and the kidneys are in adults; although in both, from their great extent of surface, they spread a very broad mark for the shafts of disease. Not the mere discharge, therefore, but the cause of it is, in the first instance, to be removed, and the ill effects are to be guarded against by keeping the

purging within bounds. For this purpose, the chalk julep, as it is an astringent only by absorbing the acrid, or changing the acid, and irritating matter, is as safe as it is useful; becomes an excellent anodyne, or composing medicine, and after the bowels have been well cleansed, will usually accomplish the cure.

REGARD is to be paid to the kind of stools that come away, which are seldom healthy and natural, and are usually distinguished into the sour and curdled, slimy, mucous, green, pale, clayey, watery, and bloody, some of which are at times also fetid. Under some of these, and particularly the latter, a powerful purgative, such as senna-tea, is generally necessary, if the child is not very young. True bloody stools, indeed, are less common in infants than adults, and seldom occur but in the last stage of the disease; but a few streaks of blood may sometimes be mixed with the feces, which arising only from the small veins near the bottom, is of no consequence.

Watery

Watery stools will be considered apart, under the head of the true watery-gripes: at present I shall observe, that very threatening appearances of that affection, when green and curdled matters are purging off, are sometimes happily removed, in a day or two, by a gentle emetic and such a warm purge as that noticed below. When the stools appear very slimy, and more especially the sour, or curdled, or when the child is much disposed to hiccough, the magnesia, and other absorbent powders are calculated to afford peculiar assistance, and may be warmed by the addition of a little grated nutmeg. When the stools are very green, or white and clayey, a drop or two of the water of kali may be occasionally put into the other medicines, or a little soap be dissolved in the clysters, which are essentially necessary when much griping attends this complaint; some light cordial is also frequently useful, and the child's belly may be rubbed with a little warm brandy, or be fomented with a decoction
of

of chamomile flowers, or white poppey heads.

It may be observed, in this place, as a pretty general indication, that purgatives for infants ought to be made potentially warm, by the addition of a little ginger, pounded cardamom-seed, caruatega, or dill-water; which is of more consequence than is generally apprehended. I have, indeed, known a careful attention to this circumstance alone, happily suppress complaints in the bowels, which had long continued obstinate, though, in other respects, properly treated. On this account I venture to recommend the following as an excellent general remedy, especially as infants are pleased with it, and it will keep for a great length of time.

TAKE of rhubarb fifteen grains; half a dram of magnesia; sweet fennel, and dill waters, of each six drams; half an ounce of syrup of roses, and ten or fifteen drops of the compound spirit of ammonia: of this, one, two, or three tea-spoonsfull, according

according to the age of the infant, may be given, two or three times a day. Or three or four grains of rhubarb and magnesia, with two or three of nutmeg, may be given in a tea-spoonful of the solutive syrup of roses.

SHOULD purgings return frequently, it will be very useful (especially in the time of teething, or upon the striking in of some eruption on the skin), to procure a little discharge behind the ears, or to apply a burgundy-pitch plaister to the back. For the former purpose, some finely pounded Spanish flies may be rubbed on the part, till a slight excoriation, or rawness, is produced; or perhaps a better, though not a common method, is to draw a piece of coarse doubled worsted, or a bit of narrow tape, through a piece of common blistering-plaister, and lay it close behind the ears where they rise from the head, and to repeat it occasionally; which will produce a discharge exactly from the spot where it is wont naturally to arise. The following

following preparation is highly extolled by BOERHAAVE, as an almost universal medicine in the diseases of infants; and is certainly a good remedy, especially in their bowel complaints, and particularly when attended with green stools, after the exhibition of proper opening medicines; it being itself a restraining.

TAKE of Venice soap, two drams; prepared pearls, one dram; prepared crabs-claws, one dram and a half; syrup of marsh-mallows, half an ounce; mint-water and fennel-water, of each three ounces; mix them—A desert spoonful is directed to be taken once in eight hours.

NOTICE is taken in another place*, of pale stools being no uncommon occurrence when children are breeding their teeth. They are also met with in fevers as well as in simple disorders of the bowels: the complaint, however, has been found most

* See the Chapter on *Teething*.

obstinate in children who are turned of a year old, and cutting their double teeth. The stools are not only clayey, thin, and very white, but curdled like those of very young infants at the breast. In the beginning, it is seldom attended with any degree of pain, or other complaint, except it be the loss of appetite; and this has led parents and sometimes other people to think, that the discharge ought to be checked by absorbents, or opiates. But nothing can be so improper; the skin soon becoming hot, the tongue white, and the disorder rarely yielding to any treatment under two or three weeks. This is almost always the case, if teething be any wise concerned in the complaint, unless the teeth happen to be nearly cut through: though a purging with pale stools, it has been said, is met with in fevers of another kind, where the cause is confined wholly to the first-passages. But, whatever the age of children may be, they are always somewise indisposed while the stools are of this

this colour; and whether there be either purging, or fever, or not, children lose their flesh, as it is, indeed, likely they should, from this clay-like matter sticking to the coats of the bowels, and preventing the due absorption of the nutritious parts of their food. This is especially true when they are thick as well as pale, or when they are of a leaden-blue colour, and very adhesive, or pasty, and in an amazing quantity, as is sometimes the case.

WHETHER teething be materially concerned or not, purging is the proper and principal remedy, unless the gums are in a state to be lanced, or the stools should continue a long time very pale, or clayey, after the fever and purging disappear. In the latter case, some saponaceous medicine will prove serviceable, such as the water of kali, or a few drops of the compound spirit of ammonia, taken two or three times a day; the bowels being still carefully kept open.

WHERE teething is the probable source
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of irritation, and of those pale stools, but lancing the gums has not accelerated the irruption of the teeth, or the period is too early to expect benefit from it, children are not only free from fever, but are, on the other hand, cold and languid, and should therefore be purged less frequently. Some cordial medicine should also be administered on the intermediate days, as well as on the evenings after the physic has operated.—The following is a very proper one, and such as I frequently prescribe: Of the aromatic confection, a scruple; spear-mint water, an ounce and half; dill-feed water, half an ounce; syrup of Tolu, or of saffron, a dram; compound spirit of ammonia, ten drops—As cordials are frequently mentioned, the above may serve as a general guide, and may be made more or less warm, by a greater or less quantity of the aromatic confection, or spirit of ammonia.

In the early part of the disease, the active purges are the most proper, such as castor-oil,

oil, fenna, and sometimes calomel; or, if the fever be considerable, an infusion of burnt-sponge and fenna, a preparation equally adapted both to the fever, and this kind of purging.

ANOTHER bad kind of stools appears sometimes during teething, that cannot fail to alarm parents, and may, possibly, puzzle some medical men, since nothing like it, that I know of, takes place in infants at any other period, though it is not uncommon in adults, and especially, I think, in females. This is a discharge of mucus, or of a jelly-like matter, which it has been said, appears in great quantity, and sometimes accompanied with a little blood.

NEITHER of these discharges, however, do any harm, if the bowels are kept a little more than usually open by some soft purgative, such as oil of almonds and manna, or by castor-oil; and some such light cordial as the above be interposed, or the pearl-julep, if found necessary, in order to strengthen the bowels.

THE CAUSE of this appearance seems to be of the same kind with that in adults; owing to some irritation falling on the glands of the bowels, creating and keeping up an increased secretion of their natural mucus; and it is well known, that the time of teething is that in which the bowels are peculiarly liable to irritation.

WHEN purgings have continued a long time without any amendment, a peculiar tightness of the skin will sometimes take place in the last stage of the disease, affording always an unfavourable prognostic; and of which further notice will be taken under the article of *Skin-bound*.

I COME, lastly, to treat of the true *Watery-gripes*, so called, which is esteemed the most dangerous of all purgings, and is usually thought fatal, though perhaps without reason; since if properly treated, children recover from it as well as from excessive purgings of any other kind, unless it happen after some other illness, or to very small and tender infants during the

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month. It is not the having a few thin stools, however, that is an evidence of the true watery-gripes, for in almost every purging of a few days continuance, the stools are very thin as well as numerous. But in this case, they are thin very early in the disease; the child looks wretchedly, and every thing it takes runs almost immediately through it, with very little change. It should likewise be remarked, that these symptoms continue, and are increased as the disease advances; it having been already noticed, that there is a semblance of watery-gripes, that will otherwise deceive, as it requires a different treatment. In this case, the stools are perfectly watery, and tinged only with the bile, and are very numerous; the thin stools arising from a violent, but ineffectual effort of nature to get rid of offensive matters; for upon exhibiting a warm purgative or castor-oil, very thick, and always clayey stools are brought away. A mixture with chalk and aromatics should then be administered; to

to which laudanum should be added, if the stools are still too numerous, and the child appears much debilitated. The purging medicines must be afterwards repeated as long as the stools shall be clayey; and the restraining cordial interposed, as occasion may require.

IN the *true* watery-gripes there is not the like indication for purging, but the CURE should be begun by administering one or more emetics, especially when the stools are of a dark colour and fetid, as they frequently are in the earlier periods of the complaint. And to this end, a pretty strong one should be prepared, which should be given in divided doses, at about a quarter of an hour's distance, till a proper effect is produced; and some hours afterwards a warm purge with rhubarb should be administered, if the disease be not very far advanced. After the first-passages have been cleared, the eighth part of a grain, or less, of ipecacuanha, given every three or four hours, with a few grains of testa-

ceous powders, or the aromatic confection, appear to me amongst the best remedies in the earlier periods of the complaint. Indeed, ipecacuanha in very small doses, especially if duly guarded by some gentle aromatic, is both so useful and safe a remedy, that it should not be hastily laid aside; and when persevered in the use of for some time, will effect wonders, not only in long purgings, but in other chronical complaints. Alike useful, in many cases, is the antimonial wine. It is, indeed, only by experience, that we are enabled to give a just preference to different medicines of the same class. In the less aggravated watery-gripes, particularly; or where a purging is for a long time attended with very bad stools, forbidding the use of restringents; as well as in some little feverish complaints, I think I have found the antimonial-wine more agreeable as an alternative than ipecacuanha, because less disposed to nauseate infants where an emetic may not be directly intended. There being
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ing also cases in which it is desirable, that a medicine may operate as a corrector of the secretions in the first-passages, or to expel their contents, either upwards or downwards, as may be ultimately most useful, antimonials seem in this view likewise to claim a preference to all other medicines.

IN the more advanced stages of the watery-gripes, and where the child is not very young, the following old medicine is a very good one. Of *Locatelli's* balsam, one ounce, and conserve of red roses, two ounces: from the quantity of an horse-bean to that of a nutmeg, may be given three or four times a day, according to the age of the child.—The labdanum and other plaisters likewise, as directed for vomitings, or the following, may be applied to the parts above the navel, especially in case of great pain: Take of Venice treacle, one ounce; expressed oil of mace, two drams; and oil of nutmeg, three drops; mix them into a plaister, to be spread on a piece of soft leather; or the following: Take white pop-

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pey-heads bruised, two ounces; galls, one ounce; bistort-root, and cinnamon, of each two drams; boil in two quarts of water to one quart, then add of old red port wine half a pint. Flannels dipped in the above liquor made hot, are to be applied several times a day.

SHOULD these means fail, I have known the repetition of a vomit give an immediate check to the complaint, especially where the stools continue to be remarkably four. As long as this is the case, it would be both vain and hazardous to exhibit opiates, or powerful restringents: the acidity must be first carried off by warm purges, and be corrected by absorbents; the latter of which must be given in large, and repeated doses, and frequently their powers be augmented by the addition of the water of kali, or tincture of myrrhe. The acidity once removed, a starch clyster may be thrown up, two or three times a day, with, or without a few drops of laudanum, according to the number of the stools, and weakness of the infant.

infant. A drop or two of laudanum, likewise, may now be given, once or more in the day, (according to the age of the child) either joined with some purgative, or in any of the afore-mentioned medicines, or in the chalk-julep, made warm with tincture of cinnamon, or of cardamoms; and in cases of extremity, in the decoction of log-wood, which agrees very well with young children.—In the advanced stage of watery-gripes, or in the case of great debility, a liberal exhibition of aromatics and opiates is essentially necessary.

BOWEL complaints, it was said, are frequently owing to improper food, which on this account, should at all times be peculiarly attended to; and when a purging has taken place, ought to be suited to the nature of the stools. In the third volume of this work, some further notice will be taken of the article of children's food; at present, I shall only observe, that cow's milk is often found to disagree with them when their bowels are disposed to be too open,

at which times, a little lean mutton broth, or beef-tea is abundantly preferable. On the same account, rusks and biscuit-powder are more suitable than bread*; but at other times, I believe, either the Uxbridge, or the French roll, which are already half digested by a previous fermentation, are more easily dissolved in the stomach, if there be not a predominant acid in the first-passages. But where there is an habitual disposition to purging, I know of no diet so proper for infants who do not suck, or who cannot have enough of the breast, as flour slowly baked for a long time, till it breaks into a soft, greyish-coloured powder†, and afterwards mixed with boiled cow's milk, the scum being first taken off;

* Rusks are preferable to tops and bottoms, as they are called, which have a good deal of butter in them.

† To this end, the flour should be put into a small jar properly covered, and be taken out of the oven several times, and stirred up from the bottom and sides of the jar, that it may not run into hard lumps, but the whole be equally baked.

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the flour and milk should then be boiled a little time together, till the whole appears like a thin custard. This is a very light and soft food, and sufficiently restraining; and I have often known more good from it, than from all the absorbent medicines ever devised, and have received more thanks for the prescription, as it proves a permanent remedy. The powder of arrow-root, boiled in water, and then mixed with milk, is an admirable remedy when it can be procured genuine. When the watery-gripes, or indeed any violent purging, attacks very young infants at the breast, no other food ought to be administered, but the wet-nurse be changed, if the acidity and purging continue many days, and medicines do not seem to take a proper effect; which they cannot, if any offensive matter be continually taken into the stomach.

IF infants ill of watery-gripes, are brought up by hand, the strictest attention must be paid to their food, which must be changed from one kind to another, and especially

pecially trial be made of broths, as long as the food shall be disposed to turn very acid on the stomach. In one case, I think I saved a child by BATES's julep of life, lowered with water, when nothing else would stay on the stomach. This served both for food and medicine; for the former of which it was still further diluted.

WHEN children who are weaned, are attacked with repeated purgings, and even broth is found to run through them, I have observed no food so generally useful as a bit of the white of chicken, not over-boiled, and afterwards lightly bruised in a mortar with the chicken liquor, and a very little bread, into a kind of light jelly. But this should not be given oftener than twice, or at most, three times a day.

IN all bowel complaints, it has been already remarked, that infants are disposed to eruptions on the skin; by which they are so frequently benefited, that if any kind of rash appears during long or severe purgings, a recovery may be almost with certainty predicted.

INCONTINENCE *of* STOOLS.

THE long continuance of the last mentioned complaint, as well as others that may debilitate the habit, may prove an occasion of that now under consideration. Children who are at all times accustomed to have a very open belly being especially liable to lose the faculty of properly retaining their stools, and need a servant continually to attend them, even at two or three years of age; insomuch that some have been suspected of being culpable in the matter.

No very appropriate remedy, I believe, is likely to be necessary, having never ordered any thing more than dashing the parts, daily, with cold water, and administering lime-water, or other absorbent: the complaint wearing off as such children grow up; though oftentimes not entirely for several years.

WORMS.

WORMS.

WORMS may, probably, exist in almost any part of the body, as well as in the stomach and bowels. They have, accordingly, been found about the heart, in the bladder, the nose, and sinuses of the head, and even in the lungs, liver, and other solid parts. But as we neither know how they are produced, nor how to dislodge them from these recesses, which they also more rarely occupy in young children, it is quite sufficient to notice the fact; our inquiries being properly confined to worms in the first-passages.

It is on this account, that the complaint is noticed in this place, especially as worms are said to have been voided by infants of only a few weeks old. It is even reported, that they have been discovered in the still-born fetus. This, indeed, is much doubted by others, it being a very old observation, that

that worms are never found in infants who are nourished only at the breast; and if so, it is not likely they can be generated before birth. *Mr. De Lille*, however, disputes this, asserting, that worms were expelled from his own daughter, when only eleven weeks old, and living entirely at the breast.

HOWEVER this may be, it is evident, that worms are much oftener suspected to be the cause of children's complaints than positively ascertained; and of this, practitioners who deal in secret medicines, have in every age made their advantage; it being certain, that a mere foulness of the bowels will produce all the evils attributed to worms. Neither are all children equally affected by them where they are actually met with; some infant-children (as well as quadrupeds) continuing very healthy, though they are seldom free from them, and others parting with great numbers, unexpectedly, without any previous indisposition; whilst some children are very
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ill who have apparently very few. The pains and other complaints in such cases arise from some other source, of which I lately saw an instance in a girl of twelve years of age, long subject to excruciating pains of the stomach, for which she took various worm-medicines, and actually parted with several of the large round worms, but without the least relief to her pain, which immediately yielded to antispasmodic remedies.

I, nevertheless, cannot agree with Dr. BUTTER, that worms in the human intestines are altogether innoxious, much less, as he seems to think, useful, and intended as “nature’s remedy for destroying the superabounding morbid humours; and for stimulating the first-passages by their crawling motions, and thereby assisting the natural vermicular motion of the guts to carry off what remains of the offending load.” On the other hand, children who are most troubled with worms are generally of a costive habit.

WORMS become hurtful chiefly from their numbers; first, when they obstruct the bowels, or compress the adjacent parts by their bulk. Secondly, by sucking up the chyle designed for the nourishment of the child. Thirdly, by irritation. Fourthly, by actually destroying the parts; though this is certainly a very rare occurrence, and a far less frequent source of injury than those before mentioned. Worms have, however, been said to eat their way through the bowels; and it is related, that some resembling the round worm, but of a whiter colour, have been seen coming from an abscess on the ankle*. They are likewise said to have occasioned sudden suffocation, by rising up into the throat and lodging there.

THEY are chiefly of four kinds, the large round worm; the very small maw-worm,

* Their appearance on a sore may, however, be otherwise accounted for than by supposing they have made their way from beneath the ulcer.

resembling

resembling bits of thread; the short, flat white worm, and the jointed, called the tape-worm, which is often many yards long. This is the most hurtful of all, and most difficult of cure, because it will remain long in the bowels even after it is dead, and is then seldom brought away but in pieces, and that by very powerful medicines: but this kind of worm is certainly not common in children.

THE SYMPTOMS of worms are various, and many of them very equivocal: I shall name only the more constant, and less uncertain ones. Such are fetid breath, especially in the morning; bad gums; itching of the nose, and of the bottom, especially from the maw-worm; a very irregular appetite, always in extremes, whether of hunger or of loathing; a large, hard belly; pains at the stomach; sometimes vomiting, oftener costiveness or purging, with slimy stools; irregular colics; thirst; dulness; peculiarly unhealthy and bloated countenance, with a dark, hollow circle round the eyes;

eyes; startings in the sleep, and grinding of the teeth. To these symptoms are often added, slow fever, with a small and irregular pulse, pale, or whitish urine, a short and dry cough, (which is an almost constant symptom where the complaint is of long standing, and has injured the health;) sometimes even convulsions, epilepsies, and partial palsies of the lower extremities. In the case of convulsions, if there be a small pulse attended with a hiccough, it is an almost certain sign that the convulsions are occasioned by worms. The like may be said of a pain in the stomach, if it be very violent, sudden, attended with great anxiety, and a hardness and foreness of the parts above the navel. But more especially a pale swelling of the upper lip, and of the nostrils is a certain token of worms.

THE CAUSE of this troublesome complaint is not, perhaps, certainly known; but the great moisture of young persons is thought to be an occasion of their being more infested with them than older people:

and children, whose digestion is weak, are more liable to them than others.

BUT whatever be the cause, the general intention of CURE is obvious enough, which is to bring them away in the most easy, and expeditious manner, whether alive or dead; the difficulty chiefly consisting in dislodging them from their firm attachment to the sides of the bowels.

IN this view, systematic writers state the indications to be, first, to destroy the slime in which they lodge, and secondly, to kill and expel them. The first may be effected by the water of prepared kali, Venice soap, bitter aromatics, and mercury; or by resolvents, as the gums, asafoetida, galbanum, and such like. Secondly, worms are killed by oils, (in clysters) by honey, and by indigestible substances, as the testaceous powders, steel, and tin; and by mercury, which at the same time expels them. To these ends, indeed, a variety of medicines, pretty much of the same kind, has been devised, and has served the cause of empiricism

ricism in every age. Most of which consist either of the bitter purges, or mercurials.

WORMS existing in the bowels can, indeed, only be carried away by purging; and very active purges are indicated when the time of life and the constitution do not forbid. But when these are tender, gentle purges given duly for some time, by the constancy of their operation produce, without harm, an effect equally, or perhaps more beneficial and lasting, than the active purges. These are often joined, or administered alternately with bitters; and hence have arisen the family receipts, as worm-feed, tansey, and such like, given in treacle or honey, or joined, as it has been said, with rhubarb, fenna, or other gentle laxative. Olive-oil, likewise, has been said to be a good remedy, as being destructive to worms; but castor-oil is preferable, which by its purgative quality also carries them off by stool.

AGREEABLY to the above view of gradually ridding the habit of these vermin, chil-

dren of a delicate frame, and such as have not been long infested with them, may begin by taking a little fenna-tea every other morning; but should this, in any instance, prove insufficient, a few grains of the powder of scammony with calomel may be given the over-night, once or twice a week, according to the age and strength of the child; and some bracing medicines be interposed. If purging much should, on any account, be found improper, the following is very safe and often effectual.

Filings of pewter two ounces, of quicksilver, three drams; to be rubbed together by the apothecary into an amalgama.

ABOUT eight or ten grains of this powder, with three or four grains of rhubarb, and as much unwashed calx of antimony, may be taken every morning in a little honey, for a week together; after which, a clyster of five or six grains of succotorine aloes, dissolved in a cup of warm milk, should be thrown up over night, and a proper dose of rhubarb, or fenna-tea be taken the next morning :

morning: which course may be repeated, as the obstinacy of the complaint, or the strength of the child shall direct.—The compound spirit of ammonia also, in some debilitated habits, will prove serviceable; as well as valerian, especially if it be occasionally joined with jalap. But one of the most powerful means, long in use with country practitioners, and of late strongly recommended, is the couhage variously prepared; but the most simple form, that of giving it mixed up with treacle, is, perhaps, the best of all. It should be taken night and morning for three or four days, and then be purged off with fenna-tea, or jalap; and this course be repeated, as occasion may require.

AMONGST other means, especially for such as may be at a distance from medical assistance, is a mixture of pewter filings and treacle, of which children of four or five years old, may take several tea-spoonsfull in a day, almost at pleasure; which they will also readily do, for the sake of the

treacle. At the same time, from five to ten grains of jalap, with as much of the quicksilver with sulphur should be given twice every week, to purge off the dead worms. The rust of iron has been strongly recommended, in the dose of five grains to half a dram, for infants from one year old to five, exhibiting a purge every fourth or fifth day, to carry the worms down as they die. To answer the last purpose, the following plaister is sometimes sufficient; it should be applied on the belly, a piece of cotton being first laid over the navel.

TAKE of succotorine aloes, and of the powder of chamomile flowers, of each a dram; of Venice turpentine, a sufficient quantity, to form into a plaister; to be spread upon thin leather, with a little margin of sticking plaister, that it may keep its place. Or equal parts of bullock's gall, and powdered aloes, may be mixed up with butter, and the parts below the navel be anointed with it, two or three times a week; or succotorine aloes and powder of
dried

dried rue, made into a plaister with Venice treacle, and applied round the navel, first covering that part with a little cotton.— I mention these things with a view to the country poor, whom the benevolence of their neighbours may incline them to assist, and who may, by these easy means, do it at so little expence to themselves.

IF the complaint, however, has been of long standing, and the child not very young, mercurial purges are the most expeditious remedy; though the quicksilver with sulphur, taken for a length of time, and occasionally purging with fenna, has sometimes succeeded, even where there have been the severest convulsions. For which likewise, or obstinate contractions of the limbs, the warm-bath is often essentially necessary.

THROUGHOUT the cure, and indeed afterwards, the diet should be strictly attended to, and all fat and greasy aliments abstained from. The child should live upon milk, broths, and meats of easy digestion,

with toasted bread and honey, instead of butter, which is exceedingly pernicious.— To prevent a return of the complaint in older children, or grown people, chalybeate-waters* and bitters may be made use of.

As it is not my intention to enter formally into the distinct treatment often necessary for the tape-worm, (which, indeed, I have sometimes seen brought away by very gentle means); I shall do no more than refer to SHMUCKER'S new medicine, as well as the celebrated remedy of *Madame NOUFFER*, said to be made use of with great success in *France and Geneva*; as I have also known it to be, two or three times, in this country. It can, in nowise, however, be proper for young children, though it may, possibly, be safely had recourse to for robust youths, growing up to manhood. It is intended

* A very good artificial chalybeate may be prepared of four or five drops of the common steel-wine of the shops, in a table spoonful of water, and may be given
o or three times a day.

to operate very powerfully on the bowels for many hours, the patient being supported the while by repeated large draughts of broth or green-tea.

THE preparation of the preceding day, and some other precise directions, are equally needless in this place, and perhaps the previous exhibition of two or three drams of the root of the male fern, is of as little importance.

The purge is as follows:

TAKE of sweet mercury well sublimed; of the resin of scammony, each ten grains; of gamboge, six or seven grains; of conserve of hips, a sufficient quantity to make all into a bolus.

THE Cavadella, or Indian Caustic barley is recommended by a foreigner, as an infallible remedy for the tape-worm. He directs a dram of the seeds, in fine powder, to be given every morning, fasting, mixed with honey; and to exhibit on the fifth morning some powerful purgative.—Neither of these remedies should be administered

tered but under the eye of some medical man.

CONVULSIONS.

CONVULSIONS have been said to be induced by the last mentioned, and several of the preceding complaints. They are of two kinds; the one depending upon some other disease, or secondly, that which is truly an original complaint, arising from a morbid affection of the brain; though the distinction may not, perhaps, be perfectly accurate. It is for want of some such discrimination, however, that writers have had occasion to observe, that children are much oftener supposed to die of convulsions than they really do; for though a convulsion frequently closes the scene, it has generally arisen from the great irritability of their nerves, and violence of the disease under which they have laboured. But should it be granted, that the convulsions

fions of children are generally owing to some other complaint, infants may, nevertheless, be said to die of them more frequently than some authors have allowed; for where a disease is disposed to produce violent convulsions, the convulsion, though a mere symptom, may carry off the patient*: and as it may sometimes be prevented or removed, by its proper remedies, (the disease which occasioned it being at the same time properly treated,) infants may often be recovered, who would otherwise expire in a convulsion-fit.

* Notwithstanding the force of the above observation, it is a great satisfaction to be able to affirm, that however some medical writers may underrate the fatality of convulsions, it is far more overrated by ordinary calculators, and, especially, alarmingly misrepresented in the yearly bills of mortality. And if it may be accounted a fair rule of judging from the result of my own experience, both in hospital and private practice, convulsions ought not to be reckoned amongst the most frequent disorders, and are most certainly far from the most fatal to infants; perhaps as many as nineteen cases out of twenty having their appropriate, and almost certain remedies.

SUCH

SUCH original CAUSE may be a rash improperly repelled; but is much oftener seated in the gums, in the time of teething; or in the first-passages, where some undigested matter, or merely pent-up wind, irritates the coats of the intestines, and produces irregular motions throughout the whole nervous system. Instances of this kind are related of children who during the first months have had frequent attacks of violent convulsions, which have disappeared intirely, upon the prohibition of meal-pap. Indeed, too much caution can scarcely be given on this head, thick victuals being a more frequent occasion of convulsions in young children than is commonly imagined. Many infants can bear no kind of thickening in their food; any sort of bread, rusk, &c. disordering their bowels, by occasioning their contents to turn pasty, and cleave to the coats of the bowels, whereby, it has been noticed, a due absorption of the nutritious part of the liment is prevented, so that children, in
the

the daily habit of taking sufficient food, are always emaciated. Weak and tender as they are, they in this state require repeated purges, especially of castor-oil, with some light cordial on the intermediate days, and a total abstinence from farinaceous food. For such children, veal-tea mixed with milk, is amongst the most innocent and nutritious. Any offensive load, whether from too great a quantity, or bad quality of the food, by occasioning a faulty secretion, must act like a poison; and that the convulsions are owing to this cause may often be known by the complaints that have preceded them, such as loathings, costiveness, purging, pale countenance, large belly, and disturbed sleep. If the child is two or three years old, any load at the stomach may be more readily discovered; the tongue will be foul, the skin hot, and the pulse quick and weak.

ANY little matter capable of irritating the nervous system, it has been observed, will induce the symptomatic, or first species

cies of convulsions in some infants, whilst others will withstand a great deal. For such habits as the former, the cold-bath will be found the best preservative. Every young infant is, however, more or less, pre-disposed to this complaint; and the disposition continues throughout childhood, in a proportion to the tender age, and delicacy of the habit. The younger and more irritable, therefore, an infant may be, it will be so much the more liable to this convulsion, especially from any considerable disturbance in the first-passages, as was mentioned before, particularly the bad quality, or over thickness of the breast-milk, or other food; and from frights of the wet-nurse. Of this I remember a remarkable instance in a patient of my own, in whose house a visiter suddenly dropped down dead. The mother of the child, which was six months old, was exceedingly alarmed, but her attention being for a moment called off by its crying, she incautiously put it to her breast. In an hour afterwards

wards, the infant was seized with a fit, and lay either convulsed or drowsy, without so much as taking the breast, for the space of six and thirty hours; though it was at length happily recovered.

AMONG the various causes of convulsions, (though equally an occasion of many other complaints) may be mentioned that of foul air, and want of cleanliness in the dress, and other accommodations of infants; against which, the lower class of people are, in this work, cautioned repeatedly, nor can they be cautioned too often, nor too earnestly. Such a source of convulsions has been peculiarly exemplified in a disorder whose attack being within the first nine days after birth, has been denominated the *nine days disease*.

THIS is noticed on the present occasion, merely to record a fatal convulsion, induced by mismanagement; it being mentioned as altogether an endemic in the *Dublin* lying-in hospital, where it raged for many years, and carried off some thousand children.

But

But it appearing after a while, that the disorder might probably be entirely owing to bad air, and want of cleanliness, great pains were taken to remedy these local defects; and thereby were prevented those very frequent attacks of a disease, which under the former circumstances, had never been cured in a single instance.

THE CURE of every convulsion will consist, principally, in removing the exciting causes, which must, therefore, be inquired into. If from improper food and indigestion, a gentle emetic should be given. If the irritation be in the bowels, whatever will carry down their acrid contents will cure the convulsions, if administered in time; and we ought generally to begin with a clyster. If the stools appear very foul after common purges, (in which case there will frequently be a difficulty of breathing) a few grains of the powder of scammony with calomel may be given with great propriety. But if the disposition to convulsions continues, after the bowels have

have been properly cleansed, and no new irritation of them may be apprehended, the proper remedies for spasm should be administered, such as tincture of foot or of castor, spirit of hartshorn, rectified oil of amber, a drop or two of laudanum, or of oil of rue; which though an obsolete medicine, is a very excellent one. Rubbing the back-bone, palms of the hands, and soles of the feet with oil of amber, or water of ammonia, has likewise had a good effect; as well as frictions over the whole body; which from the consent of parts, seems to afford more benefit than might be imagined.—A very common cause, however, of recurring convulsions is worms, and where no other probable one may appear, ought to be suspected; the cure will then depend on the proper treatment of that complaint, the symptoms of which have been already sufficiently pointed out.

SHOULD the convulsions arise from the disappearance of a rash, or of a discharge

behind the ears, the warm-bath, blisters*, gentle purges, or a few drops of the compound spirit of ammonia joined with the salt of amber, have been already mentioned as the proper remedies. But when the cause is unknown, as the approach of small-pox, measles, or other eruptive complaint, bathing the feet in warm water, and throwing up a clyster, are the safest means, during the uncertainty. If from teething, after gentle evacuations, and other means directed under that head, blisters, oil of rue,

* Blisters may be dressed with the common white cerate, rubbed down till it becomes smooth, and spread upon a doubled linen-cloth, instead of the hard drawing-plasters commonly made use of, which are very harsh to the tender excoriated surface--Blisters will sometimes inflame, or be for many weeks indisposed to heal up, in children as well as in adults; in either of these cases, covering the part with a collard or other soft cabbage-leaf, (with the hard fibres on the back part cut off, and gently bruised with a kitchen rolling-pin) will often remove the inflammation sooner than any other application. Dusting the surface afterwards with the finely levigated powder of calamine stone will frequently dispose the ill-conditioned ulcer to heal.

laudanum,

laudanum, or the compound spirit of vitriolic ether, and especially lancing the gums, are the grand remedies. And in a view to the latter, it may not be altogether improper in this place, to anticipate some of the directions for doing this little, and most salutary operation*, more effectually than it, usually, is; especially in the case of convulsions. It is pretty well known, indeed, that it is not sufficient to cut down boldly to the tooth, and liberate it in every part; nor merely to free all such teeth as are manifestly making their way; but that others also must not be overlooked, which though less evidently, have oftentimes a share in the mischief. But that which I would here also insist upon, is, to repeat the operation frequently, till either the teeth make their way, or the convulsions disappear. And as no harm can arise from the repetition, I wish to enforce the idea very strongly, in every instance, where teething is regarded

* See *Teething*.

as the cause of convulsions: a perfect cure of very obstinate fits being sometimes effected by lancing the gums for even five or six days successively. The obvious reason of this direction, is, that the divided parts often tumify, or heal up again, and give rise to sufficient irritation, in certain habits, to keep up convulsions, which on the other hand, yield upon securing the nervous parts from fresh irritation occasioned by the continued protrusion of the teeth. In this view, it will likewise sometimes be proper to cut the gums across, in the manner directed for lancing the double-teeth.

WHEN repeated convulsions connected with some disorder in the first-passages, and recurring for several months, have withstood all the above means of cure and been suspected to arise from some fault in the brain, they have sometimes disappeared of themselves as the infant gets older. At other times, the appearance of some other complaint has put an end to the convulsions, and not unfrequently, changing the
wet-

wet-nurse; and sometimes even weaning children, when six or eight months old, has seemed to remove the complaint.

IF convulsions come on without any of the preceding symptoms, they have generally been concluded to be a primary disease, and to proceed immediately from the brain. Some derivation from the head is, therefore, to be attempted by bleeding, if the child seems able to bear it, or by leeches behind the ears, on the temples, or the inside of the arms; by blisters; purging; bathing the feet in warm water; friction of the legs, and rubbing the soles of the feet with the water of ammonia. If children of two or three years old are subject to slight and frequent fits, issues or setons should be made between the shoulders, or in the neck, and be kept open for a length of time: and in weakly children chalybeate waters may be useful.

THIS species of convulsion if not removed in a few days, is that from which future bad consequences may sometimes be ex-

pected, being followed by a temporary loss either of the sight, or hearing, and sometimes of the intellects. If the former, it is attended with an unmeaning countenance and a constant stare and motion of the eyes.—If water in the head be not particularly suspected, and the common nervous medicines, with purges and blisters have had no good effect, bleeding with leeches, and repeated emetics should be had recourse to; and if the bowels continue in a good state, the water of prepared kali, as a diuretic, made trial of.

SUCH are the usual remedies to which recourse has been had for the convulsion which is conceived to be an original disease; but I have now for some years been led to make trial of musk, and from no small success, think I am warranted in strongly recommending it to notice. In some of the worst cases, indeed, of long continued convulsions, and fits truly epileptic, not to be attributed to the usual uses of infantile irritation; as well as
where

where all the customary remedies have been previously and unsuccessfully tried, a free exhibition of musk has restored children to health. And this not only where the long continuance of the fits has led good physicians to pronounce them of this bad kind; but where the convulsions have also induced total blindness, or otherwise deranged the faculties for several months.

BUT when this convulsion attacks very young children, it generally terminates very soon, sometimes in ten minutes, and is, indeed, often fatal before any means can be made use of; especially in the case of water in the head. I have, however, often imagined, that we are sometimes mistaken in regard to such hasty deaths, and that when convulsions prove so suddenly fatal, they are more commonly the *symptomatic*, or secondary convulsion, and are occasioned much oftener than is suspected by over-feeding.—I have known some of the largest and finest infants I have ever

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seen,

seen, die suddenly in the month, immediately after the nurse had boasted of their having eaten three boats-full of victuals.

IN this view of the disease, a few words more may not be wholly unnecessary, especially as they will hold out much comfort in regard to this alarming complaint; by which, I am however assured, many infants have perished merely from its not being properly distinguished. For though, indeed, all convulsion-fits are in their appearance exceedingly shocking, yet under proper treatment they are much less frequently fatal than is commonly imagined, however often they may recur: and for my own part, I do not recollect more than three infants dying in convulsions, during the last four years; though I have attended some who have had more than twenty fits in a day. Neither is the frequency of their returns during infancy, nor the long continuance of such a disposition an indication of future evils, if the fits themselves be of the

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the kind here supposed*. But though experience warrants my speaking with confidence on this head, with a view to prevent any unnecessary distress that parents may endure, yet would I, by no means, put them off their guard; since the recovery, in many cases, depends so entirely upon an expeditious use of the remedy, that even the time lost in calling in assistance from abroad may be fatal to the infant.

FITS of this kind are, indeed, pretty generally known to arise from irritating matter confined in the first-passages, as has been already explained, but I believe it is not so generally understood how often such matters are lodged in the stomach, (perhaps even its inferiour aperture;) or very low down in the rectum, or extremity of the

* The above observation is, I believe, strictly true in regard to such kind of fits; and though in some others, as hinted before, the intellects have appeared afterwards to be impaired, yet are the instances so very few, that there is, upon the whole, little room for parents being alarmed in the apprehension of such consequences.

bowels.

bowels. Instances of the latter are not wanting, wherein the hardened feces have lain so low as to dilate the external parts sufficiently to expose the feces to view, and yet the infant been dead before a clyster could be procured from a neighbouring apothecary's; whereas such fits cease immediately after a plentiful evacuation from the bowels, artificially induced: and I have seen an infant in the month, lying torpid for an hour together, in a kind of fit, and apparently in the very article of death, brought out of it entirely after a large and spontaneous discharge of thick feces. In like manner sudden death has taken place when the load has been in the stomach; whilst other children have been saved by spontaneously throwing it up.

AFTER what has been said, it would be scarcely necessary to point out the remedies in a formal way, but for the sake of directing the most expeditious manner of applying them. In the first instance, doubtless, the obvious means are a soap clyster with two
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or more tea-spoonsfull of salt, (such articles being always at hand) and afterwards administering one or more of the purges formerly directed; which it may often be necessary to repeat for some days, perhaps with an interval between. But when an infant falls suddenly into a convulsion very soon after sucking, or feeding, especially if on any thing actually improper, and the bowels have been for some days in an orderly state, it may reasonably be presumed, that the irritation is in the stomach, especially if there be an unusual paleness of the countenance, indicating sickness; or on the contrary, any considerable blackness, with symptoms of suffocation; which I think do not come on so soon when the obstruction is in the bowels. And it should here be remarked, that it is not necessary, that the load in the stomach should be considerable in quantity in order to induce such sudden and alarming convulsions; it is sufficient that the stomach be really oppressed by it to a certain degree; nor does it always ap-
pear

pear to arise so much from an oppressive abundance, as from a small piece of undigested food, irritating, and perhaps confined, as has been said, in the inferior aperture of the stomach.

IN the case here described it would be improper to think of a formal emetic, at least without making trial of some more expeditious means, such as irritating the upper part of the gullet, with the finger, or a feather, or forcing in the smoke of tobacco, if that be at hand; either of which often instantly produces vomiting, and puts an end to the fit. To this end, the child should be supported by a hand placed under its stomach and belly, whilst the feather or other means are made use of; in which position the infant will be made to vomit more readily, and with less straining, than in any other.

It is further to be noted, that symptomatic convulsions are sometimes the effect of a salutary effort of nature, to produce a crisis in some disease the child labours under;

der; in which case, great caution should be used not to be over officious: bathing the feet in warm water, however, as mentioned before, will be perfectly safe, and perhaps useful.—Having spoken of opiates, I shall just observe, that though they are often very serviceable, when judiciously prescribed, they become very hurtful if improperly administered. They will, however, always be safe, where convulsions continue after the first exciting cause has been removed; or where they are so violent as to become an obstacle to administering proper remedies; or when the original complaint is of a spasmodic nature. When arising from debility and languor, the volatile tincture of valerian, administered in Calcavella, or other generous white wine, has been found to be a successful remedy.

WHEN convulsions occur many times in a day, it is of importance to attend to the distance of the paroxysms, or returns; from which a much better indication may be had of their immediate danger, than from the forcible

forcible contraction of the muscles during the fit. For, where the intervals are short, though the fit itself be not long, nor violent, the disease is more dangerous, than where violent fits are attended with long intervals.

PALSY.

THE Palsy is a more common disorder in infants, and young children than writers seem to have imagined, being confined to no age, (having been seen on the third day after birth) and attacking children in very different degrees, in the manner it does adult persons. It, accordingly, sometimes seizes the upper, and sometimes the lower extremities; in some instances, it takes away the entire use of the limbs it has attacked, and in others, only weakens them. Sometimes the speech is very much affected, and at others not at all; the intellect is also greatly impaired in some instances, and in others is only torpid: for though children may be dull and heavy, like other paralytics,

ralytics, yet when roused, their imagination is found to be fully awake to the common objects around them.

THE palsy is more commonly of that kind which attacks only one side of the body; but if it be neither fatal, nor soon cured, it is often found to steal imperceptibly upon the other. And I have known the paralytic affection quit one side of the body, to seize the other, only two days before death.

IN any case, the palsy in young subjects is to be treated in much the same manner as in adults; and being usually attended with costiveness, calls for brisk purges in the first instance, and a repetition of opening medicines throughout the course of the complaint. And, indeed, if these, together with blisters do not soon afford relief, the disorder usually becomes chronical, and the child sinks gradually in the course of a few months, or drags on a miserable life for ten or twelve years, with more or less debility of the arms or legs; but very rarely arrives at manhood. Indeed, the causes of
palsy,

palsy, particularly in young people, who are still growing, are so numerous, and are often so entirely out of the reach of art, as well from their nature, as their seat, being frequently in the nerves themselves, or the brain, that such an event cannot be wondered at.

BUT where no morbid change of parts has taken place, perhaps infants and young children are oftener perfectly cured than those more advanced in years, by the mere exhibition of two or three brisk purges, whereof calomel often forms a necessary part, as the palsy frequently originates from foul matters in the first-passages. After purging, blisters should be applied, and if no fever attends, nervous medicines be administered, such as valerian, castor, prepared ammonia, and the compound spirit of vitriolic ether. In some instances, the bark and steel have proved useful; or frictions with flannel and aromatics, or ether, and the use of the waters at *Bath*; and as frequently as any other mean, electricity, especially

especially if instead of giving shocks, the electric aura only be applied, or sparks drawn from the body seated in the insulating-chair.—If the head be much affected, a small bleeding, or leeches applied to the temples, may be proper.

WHEN the palsy becomes chronical, more general remedies will be called for, according to the particular symptoms that may occur; but more commonly remedies of the warmer class.

THE palsy is sometimes occasioned or succeeded by water in the head; and in the former case, the futures of the skull being generally open, and allowing of distention, the symptoms of compressed brain will not appear so soon as they otherwise would.

IN the suspicion of water in the head, trial may be made of mercury, and diuretic medicines (as directed for that complaint;) though it is to be feared, with but little prospect of success, when the original disease has proceeded thus far.

I HAVE noticed a few instances of a partial palsy, or debilitated state, of one, or

all the extremities; but this has always soon given way. Besides teething infants, whom it has been observed sometimes to attack, I have seen it in others who are older, and the finest children, and is then generally attended with a foul state of the bowels. In any case, the only remedies I have found necessary, have been calomel or some other purgative; sometimes an emetic; and a volatile embrocation to the limbs. Electricity, I am told, has been directed in one instance; and if the complaint should not yield, may as properly be had recourse to in this, as the former instances.

SKIN-BOUND.

THIS being a spasmodic affection, and sometimes attended with the convulsion called tetanus*, may very properly be noticed in this place. It is a disorder very little known either to the ancient or modern writers, (and has been less understood;) be-

* See the next Chapter.

ing only twice publicly noticed, that I know of, until a few years ago: once, at the beginning of this century, in a still-born infant, in the hospital at *Stockholm*, and about forty years ago in a *Neapolitan* girl of seventeen years of age, in the royal hospital at *Naples*; the successful treatment of whom, I think, may throw some light on this disease, hitherto so little known. It was not, indeed, till a twelvemonth after my first short account of it appeared, that this disorder began to engage the attention of the *French* physicians, in consequence of *Monsieur Andrij* being called upon to take the charge of the *Hospice des Enfants trouvés* at *Paris*. The disease, it is true, had been often seen both in that hospital and the *hôtel Dieu*, but having always proved fatal, little attention had been for a long time paid to it, till *Dr. Andrij* was elected physician to the first mentioned charity; since which time, no pains seem to have been spared in the investigation of it.

It has, indeed, been much less common

in this kingdom than on the continent, but is equally an hospital disease, and seldom met with but accompanied with some bowel complaint, and still more rarely appearing at the birth. The *British Lying-in* hospital has been very little infested with it, and, possibly, by being solely appropriated to the reception of pregnant women, which some other hospitals are not; the air of which may on that account be less pure and salutary. It was first spoken of in this country by Dr. DENMAN, in his public lectures, who had seen many instances of it in the *Middlesex* hospital; and has described it very accurately.

THE following SYMPTOMS have been considered as characteristic of the disease.

1st. The skin is always of a yellowish white colour, giving the idea of soft wax.

2d. The feel of the skin and flesh is hard and resisting.

3d. The thin membrane under the skin is fixed in such a manner, that the skin will not slide over the subjacent muscles; not even

even on the back of the hands, where it is usually very loose and pliable.

4th. This stricture often extends over the whole body; but the skin is peculiarly rigid in the parts about the face, and on the extremities.

5th. The child is always cold.

6th. The infant makes a peculiar kind of moaning noise, which is often very feeble; and never cries like other children.

7th. Whatever number of days such children may survive, they always have the appearance of being dying.

THIS disease commences at no regular period; but whenever it takes place it attacks several infants within a short time, and chiefly those, as I have just noticed, who may be in the last stage of obstinate bowel complaints, in which the stools are of a waxey or clayey consistence. It has been also remarked, that it sometimes makes its appearance as an *original* disease, and in that case more frequently within the first ten days after birth: a few children have

even been born with it, and such have never survived many days.

THE CAUSE of this dreadful complaint, when evidently supervenient to disorders of the first-passages, seems to be a spasm depending very much upon a certain morbid state of those parts, and with which the skin is well known to have a peculiar sympathy. But when, though an original disease, it does not take place till some days after birth, which, I believe, is rarely the case except in large hospitals, and other crowded apartments, the irritating cause, in such instances, is probably seated in the glands of the skin, and seems to be owing to certain seasons and local circumstances, and principally to that unwholesome air to which such places are peculiarly liable.

THE means of CURE in this country have been different from those that have lately been found successful in *France*; but instances of recovery have been very few in either. When the disorder was first noticed amongst us, its treatment was confined to
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a strict attention to the state of the bowels, and rendering the several medicines very warm by means of the compound spirit of ammonia, which was administered every four or six hours; and was the only plan attended with any success. Together with this, I after some time directed the frequent use of a warm-bath, and chafing the whole body afterwards with warm flannel; and I think myself happy in having fallen upon one part of the plan that has since appeared to have been attended with the first instances of success in *France*: though, as it appears from the case of the young *Neapolitan*, the vapor-bath is greatly preferable to immersion in warm water.

As the disease raging so much in *France* seems to differ in many respects from ours, it is very doubtful how far the plan of cure adopted there may be applicable in this country, and would therefore be superfluous to enter upon; and my own experience has hitherto not gone beyond the means I have mentioned. But as I ventured long

ago to suggest the trial of calomel, together with the bath, the expediency is confirmed, as well by the recovery of a patient in the hospital at *Calais*, as by the *Neapolitan* girl, who had this disease to a violent degree. Small doses of this medicine, therefore, with a frequent use of the vapour-bath, and an occasional recourse to cordial, and purgative medicines, seem to be the grand remedies for this dreadful disorder.

TETANUS, or LOCKED-JAW.

THIS is an equally fatal complaint, and in this country nearly as little known as an infantile disorder, as the foregoing. In some instances, it has been confined to the jaw only, as in *Jamaica*; in others, it has been attended with contraction and rigidity of other muscles of the face, and a peculiar fixedness of its features. Sometimes the rigidity has extended to the neck; and in one child I observed it to spread so compleatly over the whole body, that the limbs could
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not be bent so as to place it advantageously in a vessel, somewhat too small, appropriated to a warm-bath.

IN such instances of the locked-jaw as I have met with, the attack has not been earlier than the sixth, nor later than the ninth day from the birth, (excepting one instance, early on the tenth;) and as far as I could learn, the infants had not been constive, (as is reported to be usually the case in *Jamaica*) nor apparently unhealthy: some, I remember, were remarkably strong and lusty children. It seems somewhat to differ, therefore, from the disease termed *Jaw-fallen*, in the *West-Indies*; and in one instance appeared to have some resemblance to the catalepsy*. The rigidity has stolen on in a more gradual way in some instances than in others, but has always been very great as far as it extended, from the moment

* A species of convulsion, in which every part continues in the position in which it has chanced to be, on the attack of the disease.

it has been discovered; so that in instances where the mouth has continued sufficiently open to admit my finger, I could not thereby depress the jaw. In some, the eyes have been bloated, and the whole countenance much swollen.

THE CAUSE of this complaint has been differently conceived of. Dr. EVANS, who has been very conversant with it, attributes it to costiveness, and thinks he has greatly prevented its frequency amongst the negroe infants in *Jamaica*, by purging them from the birth.

It does not in this country seem to arise from constipation, or neglect of purging off the meconium, but is, probably, owing to a certain state of the air, (as hath also been suspected in the *West-Indies*;) and the more so, as the disease appeared only once in the *British Lying-in* hospital during a great numbers of years, and then attacked several infants in a short time.—It has appeared again, however, in four instances during the last two years.

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THE remedies commonly had recourse to, are, the warm-bath; fomentations to the rigid parts; frictions with oil and camphire, and BATES's anodyne balsam; blisters behind the ears, and to the nape of the neck; and afoetida, opium, calomel, the bark, and aromatic confection have been given internally. It remains, however, to make trial of more cordial and tonic remedies, as recommended by physicians in *North-America*, where the disease is more common than it is here; such as oil of amber, musk, and the cold-bath.

EPILEPTIC-FITS.

VERY few words on this complaint may suffice, as EPILEPSY, or falling-sicknefs, is either pretty easily cured, or usually continues through life; and is too well known by this popular name to require a particular description: an account of the various precurrent symptoms would be equally useless in this work.—It may just be noticed, that

that the patient falls suddenly to the ground, and sometimes without any perceptible warning, or at all sufficient to secure him from injury; and is usually much convulsed, especially on coming out of the fit, but frequently retains his senses through the whole.

It sometimes takes its rise merely from foul bowels; and certainly more commonly attacks children of a costive habit of body; it should then be treated agreeably to the directions already given in such cases, and especially with active and mercurial purges: after which, the bark, white vitriol, chalybeates, and sea-bathing may be serviceable. In other instances, especially in more advanced life, and towards the time of puberty, the epilepsy seems to be owing rather to a more sensibly nervous irritation. In such cases, blisters to the back of the neck may be useful, and I have experienced much benefit from large doses of the powder of valerian, and opium; but could never entirely conquer the complaint by these means;

means; the oil of amber, however, has, in several instances, perfected a cure in young subjects; and of late, where that has failed, I have succeeded with musk.

IN the worst cases I ever met with, in which the fits were very long and violent, and sometimes to the number of twenty or thirty in a day, and the disorder of some years standing, electricity has very soon rendered them weaker, reduced their number to three or four in a day, and gradually to one in six weeks; but did not entirely remove them. In such obstinate cases it is generally supposed, that the brain is affected by some local or permanent cause, and a perfect cure is consequently despaired of, though I have known the fits abate greatly after having recurred for twenty years.—Whatever tends to debilitate the system, I have found increase the number of the fits.

WHEN this disease has attacked children of five or six years of age, and where no treatment has been serviceable, the complaint has very frequently disappeared suddenly

denly about the time of puberty, and sometimes a year or two sooner. Where it does not, it will probably continue through life, and now and then prove suddenly fatal.

SAINT VITUS'S DANCE.

I SHALL be very brief also on this untoward disorder, which is equally well known, and though not often fatal, is like the former, I believe, rarely cured but in young subjects.

WORMS, and other foulness of the bowels in children, are likewise frequent causes of this strange convulsion; in which different parts, and especially the extremities are put into continual motion, giving the patient a very awkward appearance, particularly in his walk.

If the first-passages are the seat of irritation, the complaint must be treated in the manner noticed under the preceding article; and, indeed, in most cases, the cure should be begun by administering alo-
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etic, or mercurial purges. But should the disorder appear to be owing rather to relaxation, as it sometimes is, the bark, chalybeates, and other bracing remedies, especially white vitriol, and sea-bathing, are very frequently successful. I have also known it immediately yield to electricity; but in this case, it has been attended with other symptoms of palsy, which came on suddenly.—Dry-cupping has also been thought useful.

TEMPORARY LOSS *of* SPEECH.

THIS complaint when it occurs in children, though it is not a common one, takes place between the fourth and seventh year of their age; is only a transient loss of speech, and is a harmless affection: for though it may recur for a length of time, I believe it never becomes permanent. It is rather a difficulty in articulating, than a perfect loss of speech, lasts only for a few minutes, or at most, a quarter of an hour, and recurs frequently

frequently in the course of a day. It is thought to be somewhat of the nature of the last mentioned complaint, and to be occasioned by worms, or other irritation in the bowels; and sometimes by teething.

IF neither the irruption of teeth, nor the exhibition of mercurial purges, and other remedies for worms should produce a speedy good effect, any advantage from other medicines is more doubtful; but the long use of the cold-bath, or perhaps time only, whereby a child may acquire more strength, usually removes the complaint. It may be proper, however, to make trial of local applications of a stimulating kind during the fit; of which remedies, the most innocent is a lump of sugar wetted with lavender drops; and amongst the stronger, a decoction of the pellitory of Spain. Should these little remedies do nothing, and the complaint anywise increase, it appears to me, that electricity may be had recourse to with safety and propriety, by drawing sparks from the throat.

NIGHT

NIGHT-MARE.

IT will be sufficient barely to notice this affection, it being generally well known, and requiring very little to be done for it; children either outgrowing the complaint altogether, or any occasional return of it, when older, being esteemed rather as constituting an unpleasant moment, than a disease requiring medical treatment.

THE night-mare, probably, arises from a spasmodic constriction of the midriff, and muscles of the chest, taking place during sleep, and occasions a sense and dread of suffocation, and of some huge weight lying across the breast. When children, who happen to sleep with a bed-fellow, awake under the paroxysm, they are wont to say that their companion has lain with all his weight for a long time across them.

THE CAUSE of this complaint seems to be flatulency in the stomach, and indigestion; and chiefly attacks children or young people

ple of a delicate habit, and such as eat too freely of fruits, and especially such as are unripe, or who are in the habit of eating much supper, a short time before going to rest.

THE fits are of different duration, some children lying a much longer time in this unpleasant state than others; but in all, some degree of palpitation of the heart, lightness of the head, tremor, anxiety, or lassitude remains for some time afterwards.

THE curative indications are to rouse and fortify. During the fit, volatiles and fetids may be applied to the nostrils; and as soon as may be, salvolatile, asa-fœtida, or other anti-spasmodic should be administered internally. Afterwards, clysters, bitter purges, or emetics may be exhibited, as the state of the first-passages shall indicate, and the cordial volatile medicines be continued. To these should be added bitters, with testaceous powders, or magnesia, assisted by a nutritious diet of easy digestion; and cold-bathing, if not otherwise improper.

HICCUGH.

THIS has been ranked among children's diseases, but it is, by no means, a complaint of consequence, as it sometimes is in adults, though it is, indeed, a true convulsion. It occurs pretty commonly, indeed, in infancy, but seldom requires much attention, as it frequently comes on only after over-feeding, or in consequence of the over thickness, or sweetness of the food, and is one of their most harmless consequences: it offers another argument, however, for their prohibition. But when it depends on an acid state of the juices of the stomach, or occurs in long bowel complaints, it indicates a necessity for having recourse to the absorbent powders. Should it, however, continue for a length of time, the labdanum plaister may be applied to the pit of the stomach.

THE hiccough is an affection very incident also to more advanced childhood; but is equally harmless as in infants. It is well

known, that it may be generally removed for the present, by any little circumstance serving powerfully to divert the child's attention at the moment, in a way of surprize, or otherwise. And it may not be amiss to attempt it whenever the hiccough may return, in order to obviate the influence of habit, by which this affection may be increased. Caution only should be had not to make use of such violent means as might occasion any considerable alarm, which in children of an irritable habit, who are the more common subjects of the hiccough, might induce some greater evil than the one intended to be removed. A less known, and pretty certain remedy, is a small quantity of any powerful acid; lemon-juice generally answers very well, but a tea-spoonful of vinegar seldom or never fails in the accidental hiccough of youth, or of very old people.

SNEEZING.

THIS has likewise been mentioned by some writers as a complaint of young children; but

but it is certainly not a common one, and indeed I have never met with it in the form of a disease. Should it so occur, however, some one of the antispasmodic, or nervous medicines, such as musk, castor, or camphire should be exhibited. It may be occasioned by looking too long against any strong light, as the fire, and especially the sun, or other very luminous body. It has already been spoken of as a well known symptom of the measles, and of many common colds, but in neither requires any particular attention. It is mentioned here, only because I would not pass over a complaint that has at any time been ranked among the disorders of children, nor leave such readers at a loss, who being unacquainted with the distinction between mere symptoms and diseases, might at any time be needlessly alarmed by it. If violent, however, it may prove of more consequence, when in conjunction with other causes, it may rupture some of the small vessels of the nose, and produce a slight bleeding; an accident that will be noticed in its place.

TEETHING.

THE Complaints arising during dentition may next be considered, many of the foregoing being blended with it, the first-passages and the nervous system being always more or less affected. The state of dentition is likewise not unfrequently an occasion of many complaints afterwards to be mentioned, such as cough, fever, the rickets, and even consumption; under each of which heads, therefore, occasional references will be made to what will be advanced under this.

THE time of teething is a most important period of the infant state, and subjects it to manifold complaints and dangers. Some writers, indeed, seem to think otherwise, and that teething is scarcely to be ranked amongst the diseases of infants; whilst others have conceived the debate to be a mere dispute about words; but the difference, indeed, extends much further. For though I would, indeed, by no means, assert dentition itself to be a disease, and have made use of any
such

such like expression merely in a popular way, yet am I confident it induces disease in very many infants of every habit of body, and more especially, however strange it may seem, in the apparently healthy and robust. Indeed, weak and even rickety children commonly cut their teeth easily, though often very late; or if they should be harraſſed by a purging, and other complaints, they, nevertheless, escape with their lives, while very lusty strong children are frequently carried off suddenly at this period, unless the teeth happen to find a very easy passage through the gums. The system, during teething, being disposed to inflammation, such children much oftener fall into fever than the tender and delicate; like robust adults, who are more disposed to inflammatory complaints, than those who are of a colder, but less healthy temperament: and it is by acute fever, or convulsions, that infants are carried off; who are well known to survive a thousand lingering and vexatious complaints, if the internal parts are sound.

It may be here observed, however, that convulsions more rarely take place where a fever attends. There are also other circumstances that affect the process of teething, noticed from the days of HIPPOCRATES, which seem to be well-founded: That infants cut their teeth more readily in winter than in summer; that such as are rather inclined to be lean, cut them more easily than those that are very fat; and children who are loose in their belly the most safely of all. The truth of the last of these observations there can be no doubt of. The period usually commences between the fifth and tenth months, and the process of the first teething commonly continues to the sixteenth at the least, and sometimes much longer.

As this is a subject that parents are inquisitive about, I shall subjoin a few words on the circumstances of this process. It almost invariably begins in the lower jaw, and in the front, or middle teeth. Usually two of these are cut, and then the two corresponding ones in the upper jaw. After
two

two teeth in each jaw have appeared, it is in some instances a considerable time before the contiguous ones come out ; but sometimes, though not often, six or eight are cut in a hasty succession. The four double-teeth, or grinders as they are called, follow the eight front teeth, and usually after an interval of some weeks ; then the two dog-teeth, and the last of all of children's first-teeth, the two corresponding ones in the upper jaw, called the eye-teeth.

THIS wonted order in cutting the front-teeth appears to be owing to those of the lower jaw being less deep in the bone, as well as thinner and sharper at their points, and therefore likely to force their way before those in the upper jaw ; accordingly one, at least, of the front teeth in the former, it has been said, is usually the first cut. The one opposed thereto in the upper jaw sometimes appearing next, rather than the contiguous one in the lower, seems to be occasioned by the friction of the tooth against that part of the upper jaw at which
its

its antagonist is to appear. This attrition repeated every time the jaw closes, derives a greater portion of fluids to that part, increasing its natural action, and thereby forwarding the growth of the tooth; while by the forcible and frequent pressure of the gum and nervous membrane against it, as soon as it has made its way through the bone, its irruption is further assisted. If the succession be otherwise, and a second tooth in the lower jaw be cut before one appears in the upper, as for the reason already given is more commonly the case, it is not unfrequently before many days; and the two corresponding teeth, in that case, either follow in two or three weeks, in consequence of attrition, or else do not appear for some months: but whatever the period may be, they generally come forward before any more teeth are cut in the under jaw. It is usually some weeks, it has been remarked, before the other two front teeth in the lower jaw are cut, and in a week or two afterwards, if there be no constitutional impediment,

diment, the corresponding ones in the upper jaw are commonly pushed forward, and for the reason given before for the early appearance of the antagonists to the two first-cut teeth.

IN children who are strong and healthy, this process goes on pretty much as above described, and the teeth are cut both easily and soon; but in unhealthy and weakly infants the process is both slow and uncertain. Accordingly children sometimes cut their teeth irregularly, or crows, as it is called, both by the teeth appearing first in the upper jaw, and also at a distance, instead of being contiguous to each other: this is accounted, and with some reason, an indication of difficult, or painful teething. It may also be remarked, that the ease or difficulty of dentition may be guessed at, by the circumstances under which the two first teeth shall happen to be cut; the succeeding ones frequently making their way in a correspondent manner.

TEETHING is usually preceded and accompanied

panied with various symptoms: the child drivels, or flavers much; the gums swell, spread, and become hot; there is often a circumscribed redness in the cheeks, and eruptions on the skin, especially on the face and scalp; a looseness, gripings; green, or pale stools, or of a leaden-blue colour, sometimes mucous, or jelly-like, often thick and pasty; watchings, startings in the sleep, and spasms of particular parts; a diminution, or increased secretion of the urine, sometimes of a milky colour, at others, staining the cloths in patches, as if it deposited a brown powder; a discharge of matter, with pain in making water, which often mitigates the fever: in almost all cases, the child shrieks often, and thrusts its fingers into its mouth. A symptom less common than any of the foregoing, and appearing only in certain habits, is a swelling of the tops of the feet and hands: it seems, however, of no importance, and goes away upon the appearance of the teeth. I never met with it but in infants who cut them
painfully;

painfully ; and being seldom accompanied with a purging, it is likely may (in its stead) prevent that fever which is otherwise so apt to attend. In some instances, however, this symptom has been accompanied with considerable fever ; but in such, children have either been costive, or the stools been fetid and clayey, and the swelling of the extremities very considerable. I have likewise, in a few instances, met with a transient palsy of the arms or legs ; which has even sometimes recurred as often as teeth have been making their way.—The above-mentioned symptoms are often followed by cough, difficult breathing, fits, fever, scrofula and universal decay ; and more rarely, the watery-head.

STRONG and healthy children, it has been observed, cut their teeth earlier than the weak and tender ; but are more subject to fever : I have, indeed, known a weak, and rickety child, without a tooth at twenty-two months old. The fact is, that the extremes of high health, and of debility are both dangerous ;

gerous; the one being exposed to acute fever, or convulsions, the other to a slow hectic and gradual decay. Therefore air, exercise, wholesome food, an open belly, and every thing that has a tendency to promote general health, and to guard against fever, will greatly contribute to the safety of teething, and to children passing quickly through this hazardous period.

DIFFICULT teething is to be treated nearly as other acute diseases with local inflammation. If the body is at all bound, some opening medicine should be administered, and it is to be observed, that even a considerable degree of looseness is useful; few children cutting their teeth so well as those whose bellies are at this time much more than commonly open. Diluting drinks are also very necessary, especially if the child does not suck; with a light food, in small quantities, and taken frequently. If much fever attends, the loss of a little blood, in some way, will be necessary; though children do not endure bleeding so well as they do other evacuations.

tions. If the propriety of bleeding with the lancet be doubted, a leech or two may be applied behind the ears, and is generally serviceable. Clysters are also very useful, especially if there be retention of urine, which will likewise call for the use of the warm-bath. Gentle sweats are also serviceable, therefore antimonial wine, or Dr. JAMES's powder, may be given, which besides opening the belly, often operate in this way: a blister should likewise be applied between the shoulders, especially if there be any disposition to fits. And, indeed, if stools do not afford some considerable relief, there should generally be some discharge from the skin; since a purging, and eruptions on the skin, when spontaneous, are the grand means of easy teething. A little discharge should, therefore, be kept up behind the ears, by rubbing the parts with Spanish flies, applying a thread as before directed*, or putting on a small blister; which may be kept open. A Burgundy-pitch plaister laid on the back

* See Page 139.

will sometimes suffice, which should be renewed every ten days, till the symptoms disappear, or the teeth come into sight. Even before this period, slight scarifications of the gums are very useful, by taking off the tension; or if the teeth are at all to be felt, lancing them, as it is called; the proper method of doing which will be enlarged upon below.

I SHALL close what I have to offer on the general plan of treatment, by observing, that the indications certainly are to assist the irruption of the teeth, and to moderate the inflammatory and other symptoms; which must be treated according to their kind: all parts of the body readily consenting with the gums at the time of teething, but the nerves, the bowels, and the lungs, more particularly and importantly than the rest. It has been observed, that a purging is beneficial, and it is, indeed, surprizing how considerable it may be on this occasion, and how very bad the stools for many weeks together, and a child happily struggle through; though at another time, an equal degree of purging,

purging, with such bad stools, and constant fever, would prove infallibly fatal. The purging is therefore, not only to be cautiously treated according to the directions already given under that article, but is oftentimes rather to be encouraged than suppressed. Very pale stools have been said to be not uncommon at this time, and are sometimes in vast quantity: I have known an infant have fifty in one night, at least by the account of a careful and discreet nurse-ry-maid; and from the quantity of feces that I saw the next morning, I had no reason to dispute it.

For the fever of teething, besides bleeding, the absorbent powders are eminently useful, and are, in various respects, calculated to afford relief. To these, sometimes a grain or two of Dr. JAMES'S powder may be added at bed-time, which if there should be any thing amiss in the stomach or bowels will either vomit or purge; but otherwise (it has been said) will promote a kindly sweat, which is always beneficial. Nitre is

very often useful, joined with the testaceous powders, or three or four grains of the compound powder of contrayerva, or three or four drops of the compound spirit of ammonia in a spoonful of water every four hours, for four or five times; nor is a drop or two of laudanum to be feared, if the bowels have been previously opened, the pain be very great, and the breathing not difficult.

A FREE discharge from the bowels, however, must above all be preserved, when children cut their teeth with fever. The state of their gums must also be carefully attended to, or their fevers will be mistaken and attributed to cold, or other causes, when the source of irritation is wholly in the gums.

THE lungs it has been said, is one of those parts on which the irritation from teething is apt to fall, and when fixed there, the symptoms bear an alarming aspect. A precise acquaintance with their true cause is therefore of the greatest importance; or for the want of it an unsuccessful plan of cure will be adopted. I speak this from much experience,

experience, having known good physicians overlook the true cause of the inflammatory symptoms; especially when children have cut the usual number of first teeth. This is known to be sixteen, but some children cut four double teeth in each jaw, instead of only two, making the whole number twenty.

IN such cases, I have met with the most alarming symptoms; soreness of the chest, cough, and great difficulty of breathing, with loss of appetite, continual fever, and apparent general decay. In this state, purging the bowels, and properly lancing all the suspected teeth, has given immediate relief; and by keeping up the purging for three or four days, every threatening symptom has so thoroughly subsided, that in a fortnight's time, a child expected from day to day to die of inflammation, or fall into consumption, has been restored to its former health and spirits.

A PRINCIPAL indication, it has been said, is to assist the eruption of the teeth. This is attempted by cooling applications to the

gums; by rubbing them with some hard, polished body, such as the coral; or by dividing them with the lancet: which last is the only mean to be depended upon. Rubbing the gums, however, I apprehend, not only somewhat appeases pain, as adults sometimes experience in the common tooth-ach, but it also forwards the growth of the teeth, by drawing more nourishment to them; as well as assists their irruption, by pressing the gum and nervous membrane firmly against their points. Suitable application on this occasion may be, a little honey, or the syrup of white poppies; or the honey may be lightly acidulated with the diluted vitriolic acid. Besides the coral, a crust of bread, or a piece of liquorice-root, may be often carried to the mouth, and may sometimes be preferable, as they will yield a little to the pressure of the gums.

THESE means, nevertheless, and especially the coral, have been objected to by some modern refiners; but the objections are certainly groundless, as in giving this direction

rection we are only following nature. For the young of all animals who suck, as soon as the teeth begin to shoot are always strongly inclined to gnaw such things as afford a little resistance. This may be every day observed in domestic animals; to prevent which in puppies, recourse is had to a ridiculous operation of worming, as it is called, which rendering the mouth a little sore, may prevent them for a time from gnawing every thing that comes in their way: and if their gums become easy, or teeth are cut the meanwhile, they have no longer any desire for it, but what arises from the playfulness of youth.

THE intentions of the present edition may admit, in this place, of a word on the subject of charms and amulets, the use of which though inoffensive, are alike futile in every complaint, and cannot be supported by the least shadow of argument; inasmuch so, that I am almost ashamed of noticing among them that very common one, the anodyne necklace—But having been frequently seri-

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ously asked my opinion of it by people of every rank, and sometimes heard such marvellous effects attributed to the use of it, that it is hoped the reader will bear with this public declaration, that it is impossible, because out of the laws of nature, that a bit of dried bone hung around the neck, can remove pain, fever, and convulsions; or assist the animal system in forcing the teeth through the solid jaw and gum, by any tonic, relaxing, or appeasing influence whatever, which the neck-lace itself not containing, certainly cannot communicate to the human body.

WHEN it is found necessary to lance the gums, (which is ever, at least, a safe operation,) it should always be done effectually, with a proper gum-lancet, and not with a needle, a thin six-pence, or such like instrument, which will not sufficiently divide the gum, nor the strong membrane that covers the teeth. The lancet should always be carried quite down to them, and even be drawn across the double teeth. It is certain, that
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this little operation gives scarcely any pain, and the relief is at the same time often so considerable that the child appears exceedingly pleased with it, and will immediately afterwards squeeze the jaws and grind them together forcibly; which proves the gums are not very sensible.

THE most painful part of teething, and that in which children are most exposed to convulsions, is usually from the teeth cutting through the nervous membrane that covers the jaw immediately under the gums. This, I apprehend, in difficult dentition is often not cut through, but is forced up before the teeth, when they are even in sight under the thin gum; hence it is, that cutting through the gum is so very often useful, and takes off fever and convulsions, which severe symptoms could not arise merely from teeth piercing the gum, which it has been said is not a very sensible part. At other times, the pain and fever seem to arise from almost the very first shooting of the teeth within the jaw, and then they will very of-

ten not appear for some weeks after the gums have been properly lanced; and parents are therefore apt to conclude, the lancing has been unnecessary, if not improper. I am, however, convinced from experience, that this little operation, though not in the general esteem it ought to be, (and by the *French* physicians perfectly dreaded even in this day,) is often inexpressibly useful, and appears to have saved many lives, after the most dangerous symptoms had taken place, and every other mean of cure been made use of. The mere bleeding from the gums is capable of affording some relief, as it is frequently found to do in adult persons distressed with the tooth-ach. And I cannot here forbear expressing my surprize, at the fears some people entertain of lancing the gums, and their delaying it so long, if not altogether rejecting it, though no evil can possibly arise from the operation. On the other hand, its advantages are so great, that whenever convulsions take place about the usual period
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of teething, recourse ought always to be had to it, after an unsuccessful use of other means, though by an examination of the gums there may be no certain evidence of the convulsions being owing to such cause; the irritation from teething, it has been remarked, sometimes taking place in a very early stage of the business. At any rate, (it is repeated) the operation can do no harm, even at any period, and should the shooting of teeth be only an aggravation to the true cause of the disease, lancing the gums must be attended with advantage. But should teething be the proper and sole cause, it is evident how fruitless any other mean of relief must frequently be: for should convulsions, for instance, take place from a thorn run into the finger, or toe, the proper indication of cure, by an immediate extraction of the thorn, and the probable futility of other means, would be equally obvious.

THE operation may also be safely repeated, the scars doing no kind of harm. This, however contrary to popular prejudice, may

may be very evident, not only from the fact of infants cutting their first teeth very easily some weeks after being lanced, but also from the circumstances under which the second teeth are often cut. At this period, children from their more advanced age, and decreased irritability, are less subject to fever, and evidently appear to suffer far less pain, than in the first teething, though the second teeth often have to make their way through much more considerable scars than have been made by a lancet, from the gums having been lanced prematurely. This fact is likewise established from the many instances in which dentists have thought it expedient to draw out the first teeth long before the second are prepared to take their place*. The objection to lan-

* This practice is, by no means, adduced in a way of approbation, but merely for the sake of the inference drawn from the fact; the writer being persuaded, that the succeeding teeth are thereby frequently ill-placed, by one tooth appearing long before others, and growing so large as not to allow proper space for the rest.

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cing the gums from any apprehension arising from the scars, is, therefore, altogether ill-founded; and indeed, it will be frequently necessary to lance the gums several times, as before remarked*, especially on account of the extraordinary difficulty with which some infants cut their double teeth, which are furnished with two or more knobs, or points. Purging, fever, and even convulsions will sometimes arise from only one point of a large tooth offending the nervous membrane that covers it, and being nearer the surface than the other points, the lancet may sometimes not compleatly divide the membrane that lies over the rest, (or it is afterwards healed;) and this part not being injured by the tooth, the symptoms subside on having divided that portion of the membrane that was inflamed. But in a little time, another point of the same tooth is found to irritate this sensible part, and calls for the like assis-

* See pages 179, 180.

tance of the lancet, which again removes all the complaints. This, at least, I have conceived to be the process, when I have found lancing a large tooth immediately remove every terrible symptom, though the fever and other complaints have returned, and the whole of the tooth not appeared till the operation has been three or four times repeated. I have seen the like good effect from it, when children have been cutting a number of teeth in succession, and have bred them all with convulsions. Nothing having relieved or prevented these terrible symptoms but lancing the gums, which has removed them every time it has been done, one or more teeth appearing a day or two after each operation.—In such cases, it will often be proper to draw the lancet along a great part of one, or even both the jaws, instead of over only one or two teeth, as hath been hinted before.

SOME writers, however, have advised, not to cut quite down to the teeth, but
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only to scarify the gums, unless the teeth are very near; it being suspected, that the instrument often injures them, and produces caries, which, it is thought, will be communicated to the succeeding set of teeth. But this is mere theory, and I apprehend arises for want of duly attending to the state of the teeth, which are perfect bone, and covered with a strong enamel, long before they get through the gums. The manner of the second teething of children likewise forbids such a fear; for though the first set, (which are designed by nature to be only of short duration) should actually be injured by the lancet, the succeeding ones are not at all likely to be affected by the carious state of the former. For the first teeth of infants constantly decay at the roots, and are loosened and expelled by that means, when left to nature alone; and though the upper part of the new teeth are in contact with the decayed bottoms of the first set, they never suffer from this circumstance. I have dwelt the
longer

longer on this head, because writers are not agreed on the subject, and it is a matter oftentimes of no small importance. I have also imagined, that parents might not only be gratified by the information, but be reconciled to the practice from conceiving rightly of the reasoning upon which it is founded. I have, however, written from *experience*, and am *perfectly satisfied* of the propriety and safety of what I have ventured to recommend.

It should be a pretty general rule during the time of teething, to abate a little of the usual quantity of the food, and to increase the quantity of drink, unless the child is very weakly, or every thing is going on perfectly well: or if the child be at the breast, a similar regard ought to be paid to the diet of the nurse.

CHILDREN will sometimes have ulcerated gums in teething, and more frequently where they have not been lanced, which are easily cured by keeping the body open, and touching them with astringent applications.

cations. As much white vitriol, or roch alum as will give a moderate roughness to a little honey, is usually sufficient for this purpose. But should this fail in any case, it must be treated as directed under the head of Canker. (Vol. III.)

FEVER.

THOUGH some writers have supposed infants to be as liable to Fevers as adults, and from the same causes, I have, by no means, found it so, and I wish parents to take comfort from the consideration; having observed for many years, as well in the hospital, as in private practice, that infants do not readily take common fevers, though exposed for a long time to that contagion which has appeared to affect adults around them. Their fevers are also of a short duration if properly treated, unless the few that arise from some more permanent irritating cause.

YOUNG children, however, are disposed to certain febrile complaints, and to some peculiar

culiar to themselves; which I shall bestow some pains in specifying, as well as pointing out the treatment most adapted to each.

THE more frequent CAUSES of fever, are teething, foul bowels, worms, glandular diseases, some eruptive and very contagious complaint, or taking cold; and are often attended with symptoms peculiar to children. If from the last mentioned cause, and the cold be severe, it will always be attended with a cough, hoarseness, and some difficulty of breathing, and often with running at the nose, or eyes, which will distinguish the fever from all others, except it be the measles; which will be attended likewise with violent sneezing, and a peculiar appearance of the eyes not often met with in a common cold.

If a fever from a cold be considerable, the cough violent, and the difficulty of breathing very great, a blister will always be safe and expedient, and may be applied at the pit of the stomach instead of the back, as being both less painful under any motion of the body, and more readily got at to be dressed,
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or for the application of fresh cloths, where the discharge happens to be considerable. But if the fever and difficulty of breathing should not be very much abated by the blister, children though within the twelve-month, will bear and even be greatly benefited by the loss of a little blood, and if not by the lancet, at least by the application of two or three leeches, as I have frequently seen; and I mention this again, because it has been thought so highly improper for infants. But I can venture to say, they will be much less reduced by it, than by the continuance of the fever, which the loss of a little blood will, in many cases, shorten by two or three days: it is also sometimes absolutely necessary, as in pleuritic cases, in which it may even be repeated with safety and advantage. And this becomes the more expedient, from the consideration that not only inflammation, but true tubercles of the lungs are formed at a very early age. Oily medicines, likewise, made into a neat emulsion, are

often useful, especially if the child be not suckled; but they should be preceded by an emetic of wine of antimony, as there is usually much phlegm on the stomach; children never coughing it up. In many cases it is also necessary to repeat the emetic, as often as the phlegm in the throat is collected in such a quantity as seems to impede respiration. The body at the same time should be kept perfectly open, and this purpose is usually well answered by smaller doses of wine of antimony, or of Dr. JAMES's powder; but if they should fail to procure stools, as they sometimes will, where there is much fever, they rather do harm than good, unless a little manna, or rhubarb be joined with them.

THOUGH the severer treatment above-mentioned is indispensable when the cough, difficulty of breathing, and degree of fever are considerable; it is proper here to remark, that I have known children of two or three years old seized with a sudden difficulty of breathing in coughs arising from common colds,

colds, where the fever has not been proportionate to the other symptoms*. In such cases, the difficulty of breathing may arise from bile on the stomach, and it may therefore be prudent previously to bleeding and a blister, to give a small dose of Dr. JAMES'S powder, which will pretty certainly act as a vomit, if our suspicion has been just; and will remove that threatening symptom very soon.

It is very necessary here to observe, that though preparations of antimony may, perhaps, be safely administered under the eye of very attentive parents, they are very powerful medicines, and not to be prescribed without great caution†. But where such medicines are found to agree, and keep the belly open, children frequently stand in need of no other; though where the fever has been

* The like symptoms, together with much fever, it has been observed under the head of teething, will sometimes arise during that period. *See pages 226, 227.*

† I have known a nurse propose giving half a grain of tartarised antimony to an infant of a few days old.

very considerable, I have given nitre to advantage to infants of only a few months old. In the little fevers arising from taking cold, to which some children are very liable, I often join it with Dr. JAMES'S powder, (in a dose proportioned to the age) and a few grains of the compound powder of contrayerva, lowered with oyster-shell powder; which I find to be a medicine exceedingly useful, when given in time.—If the head is much affected, putting the feet into warm water, or applying a milt to them just taken from the animal, are admirable remedies; and I think have sometimes saved a life after all hope has been given up. Or a little fresh leaven, or dough, may be spread thinly over the soles of the feet. If the fever be accompanied with much cough, and attended with difficulty of breathing, which comes on by fits, both may be greatly relieved by giving from five to fifteen drops of the compound spirit of vitriolic ether, (according to the age of the child) every six or eight hours. But in the absence of fever, the breast-milk
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is often as good a balsamic as can be had; or if the child be dry-nursed, a little syrup of balsam is both pleasant and useful.

If the fever be not owing to taking cold, to worms, teething, or some eruptive complaint, it will generally be found to arise from some foulness in the first-passages, in which case, opening the belly, and afterwards giving a puke and the testaceous powders, usually remove it. On this account, great attention ought to be paid to the state of the bowels, and not only in regard to the number of stools, but their kind. This should be a maxim with all those who have the superintendence of children, especially infants, under whatever complaints they may labour; as a principal indication must be taken from the state of their bowels. In the present instance, if a laxative and emetic have not removed the fever, opening medicines must be continued a while longer, especially castor-oil; but if the stools are very offensive, the powder of scammony with calomel, or small doses of calomel alone, are

the fittest purge; though they require to be administered with caution. I have known not only convulsions, dilated pupils, and drowfiness, but also paralytic affections, attended with great pain and continual fever, induced merely by a foul state of the bowels; where, after the complaint had been unsuccessfully treated as a fever of another kind, all the symptoms have been removed at once by an active purge. Even infants of only three or four months old will often have very considerable fever, and fits, with so costive a state of the bowels as to require strong purgative medicines to be repeated for several successive days, with clysters and the warm bath, before the obstruction can be removed, or the fever will at all abate. And I doubt not, it may be matter of surprise to those who may not frequently have met with such cases, to find how great a quantity of purging medicines have been taken by a tender infant before one proper stool could be procured, and how certainly a relapse will take place, if the opening plan be not persevered in, in
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the manner recommended.—In less urgent cases, and especially in very young subjects, much gentler means will usually succeed, and after the belly has been once or more well opened, many common fevers will nearly subside; after which, it will frequently be proper to return to some of the absorbent powders, in one form or other, and that recommended by BOERHAAVE* may be as proper as any. But should the fever withstand these common remedies, or be found to increase, it will be necessary to return to some of those before recommended, or, what is often very useful, little draughts with lemon juice and salt of hartshorn, in which the latter is left a little predominant; or three or four of the salvolatile drops, in barley-water, four or five times a day, as recommended for the tooth-fever.

In many little fevers of infants, where the cause may not be so obvious as it commonly

* See the prescription under the article of *Purging*, page 140.

is, I have experienced very good effects from persevering in the use of small doses of the antimonial wine given in a saline draught; this medicine sometimes acting as an emetic or purge, and at others as a stimulant and gentle sweat, possesses very peculiar advantages. But the manner in which this medicine is prepared according to the new pharmacopœia, under the title of tartarised antimonial wine, renders it exceedingly preferable to the common antimonial wine; and may be given instead of Dr. JAMES'S powder, or the antimonial powder of the shops, in the dose of five or six drops, to a young infant; or in the dose of three, instead of five drops of the old antimonial wine. It will be necessary, however, that the bowels be somehow kept open under the use of this, and of every preparation of antimony.

THERE is a fever to which children long after the time of teething are liable, that is of no marked type, and turns out to be owing to foul bowels, but rather from the acrid secretions from the liver, or other glands, than from

from a collection of feces, or a costive habit; and is more remarkable for the great pain in the bowels than for any other symptom.

It commences like other little fevers in children, and is of uncertain duration. The pulse is oftentimes exceedingly quick, the breathing bad; the tongue dry and brown; with a cough, more or less violent, throughout the complaint. On this account, it is in the beginning often suspected to be owing to taking cold; but the cause, I believe, is always in the first-passages.

THOUGH procuring stools freely for several days is found to abate the fever, yet the child is at no time entirely free from it; though it frequently remits.

THE stools, which at first are very offensive, in a little time become very numerous, mixed with a great quantity of slimy matter, and are attended, or followed, by very great pain. This has sometimes discouraged practitioners from further purging; but where no other source of fever is discovered, and cooling and antimonial medicines

dicines are found to afford no essential relief, the exhibition of repeated purges has proved the surest remedy.

To this end, two or three grains of calomel, taken over night, and senna-tea the next morning, has seemed to have the best effect, in the earlier stage of the disorder; but after the severe pain and slimy stools have taken place, castor-oil may be substituted, and given only every second or third day; composing the bowels, and taking off the spasmodic pains, by repeated doses of laudanum, on the intermediate days, and especially on the nights after the operation of purgatives.

THIS plan should be continued until the fever entirely subsides, (which will sometimes run out to two, or even three weeks) and the appetite for food returns. Previously to which, some light bitter, given in a saline draught or almond-milk, or with the compound powder of gum tragacanth, in the intervals of purging, will tend to comfort the bowels, and hasten the natural inclination

clination for food, to which there is often a long averfion.

ON the decline of some fevers, efpecially thofe arifing from foul bowels, it is not uncommon to fee an eruption on the fkin, refembling that called the red-gum, in the month, and fometimes even the thrufh will make its appearance, though the infant may have had that complaint before; which are marks of the great difturbance the firft-paffages have fuffered, and of the confent they have with the fkin: the former, it has been faid, is always a favourable indication, but the obfervation does not hold good in regard to the thrufh.

AT the decline of certain fevers of no precise type that have lafted for ten or twelve days, (and fometimes after the fcarlet-fever) great pain of the neck has fometimes taken place, attended with a little fwelling of the part, and great tightnefs of the mufcles, drawing the head forcibly to one fide. A general debility, and want of appetite has continued, though the bark has been administered,

administered, and seemed no wise to disagree. In this state, fomentations and poultices applied to the neck, together with some volatile embrocation, has soon removed the contraction, and pain; after which, children have recovered as on a sudden, their appetite and spirits.

DURING very cold weather, I have known a flighter degree of pain and stiffness of the neck, with a little fever, return a week or two afterwards; possibly, from taking cold, and as I have thought, from improper food. The antimonial powder with salined draughts, and a repetition of the applications to the part, have in such case had an immediate good effect.

I HAVE sometimes met with a fever, more remarkable for its being attended with inflamed and sometimes painful tumours, than for any other symptom peculiar to it. These are seated chiefly on the legs, and particularly along the shin-bones; and rise in a day or two to the size of a nutmeg. They are marked with all the appearances of abscesses, feeling
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as if they contained matter, and on this account they put on a formidable aspect to such as may not often have seen the disease; but what is remarkable, they never, I believe, come to suppuration, unless irritated by the clothes, or other means, but disappear again in a few days, though the fever sometimes continues. The like appearances have been met with in adults, especially females, though perhaps more commonly in children from three to ten years of age; but are not peculiar to scrofulous habits, though the tumours have very much of a scrofulous appearance and feel. As far as my experience has gone, (for I believe it is not a very common complaint) they are conjoined more frequently with that fever which attends a foul state of the bowels, than with any other; which therefore requires repeated purging, especially with calomel: and on this account, the powder of scammony with calomel becomes a convenient preparation. Saline draughts with the compound spirit of vitriolic ether may be given on the intermediate

diate days, and in the end the bark is commonly useful.

THESE appearances have sometimes been preceded by scarlet spots, or patches, resembling those observed in malignant fevers, as was noticed under the article of rashes*.

FEVERS in children of three or four years old, are sometimes tedious of cure by any of the above means, and like those of adults require the bark (especially under the recurrence of the thrush;) which should be administered in a light decoction, three or four times a day, in such doses as the symptoms may require.

REMITTENT-FEVER.

SOME writers have spoken of a fever under this title which differs little from that I have already described as arising from a certain foul state of the bowels.

INDEED, it is well known to practitioners much conversant with the disorders of chil-

* See page 101.

dren,

dren, that various febrile affections differing in degree, and the time of their continuance, originate from the state of the first-passages; but as the treatment is similar in them all, varying chiefly in regard to the strength or other circumstance of the purging medicines exhibited, it would be equally unnecessary and perplexing to multiply names, where no essential distinction subsists.

THE present chapter therefore is added only to denote a fever of this kind (much insisted upon by some writers,) which constantly remits and encreases again, sometimes for three or four weeks, or even longer, and is attended with the remarkable symptom of picking at various parts of the body until they are made to bleed, and even become very sore, particularly the fingers, nose, the lips, or the tongue. But this fever being equally remarkable for being always, I believe, void of danger, it is necessary only to remark, that it seldom attacks children under four years of age, nor upwards of ten; and

and that although it has been distinguished into the acute, slow, and low infantile remittent, it requires much less variety of treatment than such distinctions seem to import. The proper, and always successful plan, being confined to the repeated exhibition of some gentle purgative medicine, or light cordials, when accompanied with much languor, as is not unfrequently the case.

MESENTERIC-FEVER.

ANOTHER cause of fever has been hinted at, which is obstructed glands, especially those of the mesentery, (or connecting membrane of the bowels;) and is often a fore-runner of the true hectic fever, or fatal wasting.

It, indeed, frequently arises from scrofula, which then discovers itself by other marks; and will require its peculiar treatment. But there is an early stage of glandular obstruction in the mesentery, and of the fever here alluded to, that is often falsely attributed to worms;

worms; and will not therefore yield to mere purgative medicines. It attacks children from the age of three or four years, (though the foundation is often laid much earlier) the fever remitting, and sometimes intermitting irregularly. It is always attended with its appropriate symptom a swelled belly, and usually with loss of appetite, and pain in the bowels; the latter sometimes taking place, more or less, every day, or is generally more violent if the child be a day or two free from it.

AFTER opening the bowels, half a grain, or a grain of calomel may be given to advantage, two or three times a week, and on the intermediate days small doses of prepared natron, either alone, or neutralized with the juice of lemons, or in some instances partially so. If the belly be very costive, as it often is, an infusion of the burnt sponge and fenna is more effectual than any thing; and when strained through filtering paper, makes a neat preparation, and an excellent remedy for many little fevers, in older children,

dren, where the first-passages are particularly concerned*. When the glandular fever, just now mentioned, has abated, some light bitter, as of chamomile flowers, is useful to brace the stomach and bowels; and to prevent a relapse, it will often be found necessary to administer some chalybeate, of which the tincture of ammoniacal iron is one of the fittest for children: if it should offend the stomach, a few drops of the tincture of cardamoms, or other stomachic, may be joined with it.

BUT as the mesenteric fever, from its great fatality and frequency, has very much engaged the attention of writers, it may be proper to consider it a little more distinctly in some of its principal stages; in each of which its nature and treatment sometimes materially differ. For before the mesenteric glands become much enlarged, or the fever

* Two parts of fenna-leaves (by weight) to one of the burnt-sponge, made of such strength, that the bowels may bear one or two table-spoonsfull, two or three times a day.

is continual, (which rarely take place till the belly has been for some time swelled and hard;) whilst the appetite continues, and the first digestion is but little impaired, and no purging has taken place, the opening mixture of sponge and fenna, with a few doses of calomel, and afterwards bitters and chalybeates, are the only remedies very likely to be called for; and almost always succeed. In this state, the disorder may still be considered as in its first stage, and of which an unusual costiveness, the hardness and recurring pains in the belly, and a remitting fever, are the principal symptoms. The design of this work, however, will not allow of a particular detail of the many others that attend this fever through its various stages; but in general, it may be said, that indigestion, costiveness or purging, irregular appetite, flushed cheeks, or a total loss of colour, impaired strength and spirits, remitting fever, and a hard and swollen belly, with emaciated limbs, are amongst the more constant

symptoms attending, at one period or other of the disease.

THIS being a glandular complaint, not only are the glands of the mesentery affected, but I have found those of other parts, and especially of the lungs, in a very morbid state before any of those symptoms of inflammation have been noticed, which are constantly met with, in similar cases, in older subjects.

CHILDREN are liable to this fever till they become eight, or ten years old, (and in scrofulous habits much longer); it being often a consequence of the long continuance of almost any of the preceding complaints, especially those of the first-passages and teething, as well as of the measles, and a few others; of which that from teething will be separately considered. Among the poor, it is too frequently owing to a coarse and unwholesome diet; from whence arise indigestion at the stomach, and a consequent vitiated chyle, with fulness, or obstructions in some of the internal glands or their lymphatics.

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As preventives, therefore, good air, exercise, gentle frictions, an easy dress, frequent washings of the body of young children with soap and warm water, the cold-bath in older children, and especially a light and nutritious diet, with such mild aromatics as may assist digestion, are some of the principal and most efficacious means.

BUT when this disease is completely formed, it calls for the most powerful remedies; and such have happily succeeded in several instances, wherein formerly little hope had been entertained.

As it would tend only to perplex the reader to enumerate the many less important symptoms occurring in the different stages of this long disease, especially such as arise from some peculiarity of habit; so will it be necessary to confine these observations to the more general plan of treatment, without particularly noticing a variety of occasional remedies, which such symptoms may at different periods require.

IN a general way, the principal indicati-

ons are to remove the obstructions by effecting a resolution of the hardened and obstructed glands of the mesentery; to carry off this viscid matter; and lastly, to strengthen the system, and establish a good digestion, as well by means of proper diet as by medicine. To accomplish these intentions, the class of attenuants and deobstruents, purges and emetics, and bracing remedies, must be had recourse to, in a certain order.

AMONGST the first, and as general deobstruents, are mercurial and antimonial remedies, neutral salts, soap, steel, and hemlock; to all which, with propriety I think, may be added, electricity.

IN regard to the efficacy of mercury and steel in this disease, a vast crowd of testimonies appears among writers, in almost every part of *Europe*. Calomel is, perhaps, one of the fittest mercurial preparations, and may be combined with some purgative medicine, and given for several weeks, till there shall be some favourable change in the feel and size of the belly.

THE lightest preparations of steel are usually preferable, such as its tinctures, or the salt, or merely some chalybeate water; which will act both as aperitives, and tonics, or bracing remedies. Amongst antimonials, the kermes mineral is found by experience to be more generally useful than any other preparation.

THE Evacuants mentioned as proper in this disease, were emetics and purges; to which may be added medicines provoking gentle perspiration. The two former are more essentially necessary; but must be adapted and carefully dosed, agreeably to the state of bowels of the patient. As a purge, rhubarb and tartarised kali are generally the safest and most effectual, and may be persevered in for the greatest length of time; or rhubarb and polychrest salt; which, whenever mercury may not be preferred, should be exhibited daily for several weeks, and will sometimes restore the patient without recourse to any other means, when the dis-

order is not of long standing; being at once both a purge and an efficacious deobstruent.

AMONG medicines promoting insensible perspiration, are the *sarsaparilla*, or a more compound decoction of the woods; which may be taken together with any of the above-mentioned remedies.

THE last means recommended were bracing medicines, which can very rarely be dispensed with; since although the obstructions should actually be removed, the emaciated state to which the patient is generally reduced, peculiarly calls for such remedies, especially with a view to strengthen the stomach and alimentary canal, and promote a good digestion; the only means of obtaining a bland and nutritious chyle, by which the body may be preserved in good health. To this end, the bark, steel, the cold-bath, (the latter of which especially must not be attempted till the obstructions are removed,) light bitters and aromatics, are the principal remedies; to one or more of

of which, recourse may be had, as the degree of remaining fever, and the state of the bowels may point out. To these may be joined daily frictions, especially of the belly, limbs, and back-bone; or the common soap-plaister, or one composed of ointment of marsh-mallows, gum ammoniac, and oil of chamomile, be applied over the whole belly: or the body may be covered all over with sea-salt, reduced to a very fine powder.

It has been already hinted, that the diet ought to be of the lightest and most nutritious kind, and carefully adapted to the age and other circumstances of the child; who, if at a due age, ought in many instances to partake of light white meats, as well as vegetables, and plain jellies; but always avoiding fat and greasy aliments, pastry, and whatever may not be duly, as well as quickly digested, or will not form a bland and nutritious chyle, however readily they may get out of the stomach.

THOUGH in some instances, merely purging with calomel or rhubarb, for a length
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of time, has been said to succeed, and in others, some one of the above remedies may be more adapted to the patient than the rest; yet in general, each of them will be useful, at one period or other of the complaint, and sometimes the union of several: but above all, purging is always the most essential to the cure of this dangerous disease. And though it is oftentimes attended with costiveness and a voracious appetite, it is, at others, accompanied with a loathing of all food, and frequent stools, which do not reduce the belly, but too often deter from the use of active, or repeated purges; without which, however, experience proves there can be no prospect of success, after the belly has once become enlarged.—I shall close these observations with offering the following form, which in a general way I have found very suitable. It should be continued for a length of time, taking care that the bowels be kept properly open.

TAKE of Calomel, from one to two grains;
powder of Ipecacuanha, from the half of a
grain

grain to a grain; and of ginger six grains. Mix all into four pills, with a sufficient quantity either of the aromatic, or the opiate confection, as the more costive or open state of the bowels may direct. Let one of these pills be taken every night, or every other night, or both night and morning, as the age and strength of the child may allow.—Together with this pill, hemlock will sometimes be very serviceable.

HECTIC FEVER *and* WASTING.

NOT a few both of the preceding and following complaints are sometimes found to induce a confirmed hectic fever, and wasting of the whole body, called by some writers the atrophy of sucking-children, though it often comes on too late properly to admit of the name. I have nothing new, indeed, to offer on this disease when it is far advanced, unless it be by way of encouragement to hope for a better issue in the hectic fever, under

under certain circumstances, than we are wont to expect.

THIS fever, as it is apt to arise from other complaints, is very often owing to their having been imprudently treated, or imperfectly cured, especially by suppressing some eruption or discharge from the skin, or incautiously stopping a purging, during the time of teething. In such cases, and, indeed, whenever the hectic fever is of some standing, the mesenteric glands become indurated, greatly increased in size, and often suppurate, the belly getting large, though the limbs and other parts become emaciated; which state has been considered in the former chapter, and has been shewn to be curable, or otherwise, according to the degree of hardness, and the length of time it has existed. But there is sometimes a threatening appearance of hectic fever, where, nevertheless, nature effects a salutary and wonderful change, and will restore the emaciated infant as from the very jaws of death. And this, indeed, is often the work only of nature,

nature, art doing no more than superintending, and preventing her being counteracted by the use of improper medicines, or diet.

NATURE alone will, indeed, oftentimes effect wonders for infants, and far beyond any thing to be expected in adults, if she be not officiously counteracted. And the reason is obvious; it being well observed by a great man, and a good physician, that “there is, in truth, a greater luxuriance of life and health in infancy, than in any other period in life. Infants, it is acknowledged, are more delicately sensible to injury, than those advanced in life, but to compensate this, their fibres and vessels are more capable of distension, their whole system is more flexible, their fluids are less acrid, and less disposed to putrescence; they bear all evacuations more easily, except that of blood; and, which is an important circumstance in their favour, they never suffer from the terrors of a distracted imagination. Their spirits are lively and equal; they quickly forget their past sufferings, and never anticipate the future.

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In consequence of these advantages, children recover from diseases, under such unfavourable symptoms as are never survived by adults. If they waste more quickly under sickness, their recovery from it is quick in proportion, and generally more complete than in older people; as diseases seldom leave those baneful effects on their constitutions, so frequent in adults. In short, a physician ought scarce ever to despair of a child's life, while it continues to breathe."—In further support of this sentiment it may be observed, that their complaints are not often attended with acute fever like those of adults, which however salutary in some instances, is more commonly disposed to break up the system, than to rectify the machine.

THE above mentioned salutary turns in the true hectic fever, as far as I have observed, are chiefly in that species of it arising from worms, or teething; and in which I have known recoveries after hope had long been given up, and all attempts been laid aside. There is, indeed, an atrophy, or universal decay

decay in infants, for want of the breast, or from the unfuitableness of it, (which is the true antropy of sucking infants) or of whatever else may be the child's ordinary food, (as I shall instance in another place;) but this is not usually attended with fever, and is to be cured merely by making that change, which the nature of the different occasions points out. Some remarkable recoveries have been noticed in the worm-hectic, and attributed to the free use of the quicksilver with sulphur, carefully prepared: but I have seen none so marvellous as in the tooth-atrophy. In this, I have known children after being reduced by purging, and other complaints, lying for three months together in the cradle, scarcely fit to be moved, with continual fever, flushed cheeks, emaciated countenance and limbs, a large belly, incessant cough, and almost without taking any nourishment, recover, as it were in a few days, upon unexpectedly cutting half a dozen teeth.

AFTER what I have said on this fever, it will not be expected I should offer much on the
head

head of medicines; I shall therefore only observe, that the chief object in this advanced stage of the disease is an attention to the state of the bowels. This will be found to vary frequently; sometimes calling for restraining, and at others, opening remedies. With these views, SYDENHAM'S* rhubarb-beer, and the mixture recommended by BOERHAAVE† are good medicines; the former as a very gentle laxative, and the latter for acidity and a lax state of bowels. Also purging with mercury, if that has not already been done, should even now be attempted, since children in this state will often bear stronger doses of purging me-

* Take of choice rhubarb sliced, two drams; let it be put into a glass bottle, well stopped, with a quart of small-beer, or any other liquor the child may make use of. This medicated beer is to be his ordinary drink. When this quantity is drank, a second and a third quart of beer may be poured on, as before; after which the rhubarb will commonly have lost its virtue. Should the beer first poured on be too much impregnated with rhubarb, and purge too much, another pint may be added presently after the first is drank up.

† Page 140.

dicines,

dicines, and more frequently repeated, than under any other circumstances.—Attention, likewise, should be paid to the diet, which ought chiefly to be of milk, rice, semolina, and such like, with light puddings; but above all, children should enjoy plenty of fresh air, and take as much exercise as their degree of debility may allow of.

SCARLET-FEVER, *and* ULCERATED
SORE-THROAT.

WHENEVER the Scarlet-fever becomes epidemic among adults, children rarely fail being attacked by it, in great numbers, and frequently sink under it. It is, indeed, rather a child's disease, and very contagious amongst them, but is not often communicated from them to adults.

EVEN the mildest species should be carefully distinguished from the true inflammatory affection of the tonsils, which it will sometimes resemble in its first stages: but the genuine marks of the two diseases, and the

cast of the epidemics reigning at the time, will direct medical men, who alone are equal to the treatment of this disease unless it should prove very slight. In less certain cases, a middle course should be taken, till the characteristic symptoms of the particular species shall become more evident.

THERE is, however, a scarlet-fever that is not attended with any affection of the throat, and was long ago described by SYDENHAM, though not much insisted upon by later writers, which is attended with a harder pulse, and other symptoms of an inflammatory disposition; but nevertheless, in every instance that I have met with, calls for the same general treatment, only more cautiously adapting the necessary cordials and bracing remedies to the degree of fever, especially in the commencement of the complaint.

THE scarlet-fever of every species begins with the common symptoms of fever, often with languor and disposition to fainting, sickness, a quick pulse, and pain in the head. The eyes are inflamed, and where the throat
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is affected, there is frequently a stiffness of the muscles of the neck very early in the disease, which is soon followed by some difficulty in swallowing. The affection of the neck should be carefully inquired into, especially in younger children; the soreness of the throat being sometimes not complained of in the most severe attacks of the disease, until but little prospect remains of any mode of treatment being attended with success. The fever generally increases in the evening, and is often accompanied with transient fits of delirium; but some remission takes place towards morning, with sweating; and on the second or third day the efflorescence appears on the skin, and generally first on the face, neck, and breast.

At this time, the parts tumefy, especially the hands and feet; the patient complains much of pain in the head; is either drowsy or very restless, and is at times delirious; the tongue is in the beginning very white and dry, afterwards becomes foul, and then of a florid red. About the fifth day, there is usu-

ally a remission of fever, and the eruption then beginning to scale off, disappears about the seventh. If the disease has been violent, the patient is about seven days more in a low state; and it is oftentimes a fortnight longer before he recovers his strength and spirits, and in some cases, is distressed with foul abscesses on the outside of the neck.

THE nature of this work requires only to observe, that the method of cure being directed to the two indications of the general cast of the fever, and the affection of the throat; the nature and extent of these must ever be kept in view, and the system be duly supported. Should the body be costive at the time of the attack, an opening medicine should be given previous to the administering of bark or cordials. The throat should be often gargled, or rather syringed, with some softening infusion or decoction, rendered more or less stimulant; such as the compound decoction of barley with honey of roses, warmed with the compound spirit of ammonia, tincture of myrrhe, or a decoction of

of snake-root, or other such like preparations: though the quality of the gargle is oftentimes of far less importance, than its being frequently made use of, which is absolutely necessary, especially in young children, in order to keep the mouth tolerably clean; otherwise the difficulty of swallowing will be greatly increased, as well as the morbid mucus conveyed into the stomach, to the great aggravation of the disease. To prevent this likewise, the patient ought to wash his mouth previously to taking his medicines or drinks.

THIS fever, especially when epidemic, being almost constantly of a low type, it would be unsafe to trust to saline draughts, or other medicines of that class, without the addition of the aromatic confection, snake-root, or the bark, in one form or other. A moderate quantity of wine likewise, according to the age, and degree of languor of the patient, should be given with the food, which should consist of whey, caudle, and such like thin and nutritious aliments; with plenty of

barley-water, or gruel, with a view to promote a gentle perspiration.

SHOULD the affection of the throat be evidently inflammatory, or should a case occur where the fever may seem to be of that kind, (which may be better ascertained by the hardness of the pulse than any other symptom) it will, however, very rarely bear bleeding, even in the beginning of the disease; as symptoms of debility generally attend in some period of the scarlet-fever, and will allow only of that middle course of treatment, hinted above.

IN a general way, a cordial plan is required throughout the disease, and where the throat is much affected, either with sloughs, or total blackness, the bark is indispensably necessary, howsoever thick and florid the rash, or however hot and dry the skin may be; the bark, as it were, extinguishing the fever in the milder species, above every other remedy, and in the more malignant it supports the system, till the regular stages of the fever
are

are accomplished, and a perfect crisis is formed. Young children take it very well, especially the soft extract, dissolved in a strong decoction. Should it be disposed to purge the child, a little of the spirit of cinnamon, or a drop or two of tincture of opium should be added to it; or if the child, on the other hand, should be two or three days without a stool, a laxative clyster should be injected. Where delirium attends, a few drops of laudanum are often very serviceable. If there is much external swelling about the neck, blisters to the part are frequently very useful.—Even after the efflorescence has dried off kindly, an appearance resembling the true gangrene has sometimes seized the whole of the soft palate, and fever has been rekindled; but the parts recover their natural appearance after a few days, without any eschar being thrown off.

A WORSE turn of the complaint, at this time, is a secondary fever. The limbs, especially the hands, continue swollen, and a general forenefs takes place; the patient loses

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strength,

strength, and a tendency to hectic-fever supervenes. The bark in this case is no longer useful; but soft demulcent medicines, and light cordials should be administered, with asses milk, and a light nourishing diet; and country air had recourse to, if the patient should not soon appear convalescent.

MILIARY-FEVER.

I SHALL be brief on this complaint, which does not seem to be so strictly a disorder of young children as of adults, unless from contagion; though I have seen one or more instances of it, where no other person in the family has been so affected, and without its spreading to any other.

THE eruption is preceded by the usual symptoms of fever, together with much itching of the skin, and a very profuse perspiration; which, however, procures no remission of the fever, until the eruption takes place, which is at the latest on the third or fourth day. It very much resembles the measles, but
is

is a little elevated above the skin, giving it a very rough feel. It is sometimes intermixed, from the beginning, with very small pimples of a pellucid appearance, called crystallines; which on the other hand, often do not appear for a day or two afterwards, and come out in successive crops, especially, if the child be kept over-hot. Some of the red eruptions are often larger than others, and resemble those in the scarlet fever, with which the miliary rash is also sometimes thought to be mixed, in seasons when eruptive complaints are very rife.

PREVIOUS to the eruption, as well as some time afterwards, the patient is usually very thirsty, is hot and cold, by fits, and the breathing is short and difficult. The urine is high-coloured, there is a slight delirium, and sometimes a forethroat, especially where the eruption is broad and very florid.

CHILDREN generally revive as the rash comes out freely; but unless the complaint be very slight, the fever is rekindled, and they

they acquire no appetite for food until the eruption begins to turn dry.

THIS fever being of the low kind, is attended with great languor, and calls for support; on which account both the medicines and diet should be of the cordial kind.

White-wine whey, and wine in the panada and fagoe, in proportion to the degree of debility, are generally necessary even for children of only a year or two old. The salin draught with the camphorated mixture, and a few grains of the aromatic confection, is a good general medicine; and if the symptoms are more aggravated, the bark, with three or four drops of sal volatile and of the compound spirit of vitriolic ether: blisters also are often very beneficial. A stool should be procured once in two days by means of a clyster, or a little rhubarb; and plenty of drink be allowed, which may be lightly acidulated, and at times taken cool. The chamber should be kept airy, but the child screened from the wind, and be confined to the bed, until the rash disappears.

IF

IF on the rash drying away, which in the milder species, is in three or four days, no fresh eruption should take place, the appetite and spirits soon return; and only a little rhubarb, or other gentle laxative is required, with the usual cautions in regard to diet, so necessary for every convalescent, and especially children, who have no discretion of their own. But should fresh crops appear, and the fever return, the former plan must be continued; but if without fever, a dose or two of physic, and quitting the warm bed, will, probably, put an end to the eruption.

MUMPS.

THIS is a swelling of the neck and throat, giving that peculiar cast of countenance from which the complaint has acquired the name. It is usually only a slight disorder in children, but as it advances, the skin becomes inflamed, putting on a light damask-rose colour; but the parts very rarely suppurate, or form matter. This, however,
does

does sometimes happen, but the abscess always heals kindly.

It is a complaint rather of young people than of infants; but frequently attacks children of five or six years of age. It is certainly contagious, and is often epidemic, or rife. It begins with the common symptoms of fever, which are usually slight; but the tongue is frequently covered with thick fur, or is very white. The patient complains early of a stiffness and pain of the neck, and generally the next day of a foreness of the throat; but this seems oftentimes to be merely symptomatic, the glands being rarely inflamed. At this time, a fulness of the neck may be discovered, which gradually extends to the throat, and the parts become tender to the touch, and in some instances, the pain is exceedingly great, and recurs suddenly with almost regular intervals. The swelling generally continues to increase for two or three days, and then as gradually subsides.

In general, very little medical treatment is required, it being sufficient to confine the
patient

patient to the house; at most, to give night and morning a few grains of the compound powder of contrayerva, with, or without a small proportion of nitre, and to procure a stool once in twenty-four hours. But should an unusual degree of fever attend, as is more common in such as are advancing towards puberty, bleeding will be found necessary in the beginning, and the patient should be kept in bed for the first or second day, and take a saline draught with nitre, once in six or eight hours. On the other hand, should it be attended with any uncommon languor, from eight to fifteen grains of the aromatic confection, according to the age of the patient, may be taken instead of the remedies before mentioned. When the swelling is thoroughly subsided, two or three gentle laxatives may be administered at convenient intervals.

In a few instances, after suppuration has taken place, and the sores are healed up, a hardness remains in the glands about the lower jaw, which is usually soon dispersed
by

by rubbing in a little mercurial ointment, or sometimes by only anointing with the common liniment of ammonia. Should it, however, prove tedious, a few doses of calomel and common laxatives should be exhibited, at proper intervals.

IN adult males, or such as are growing up to manhood, the swelling of the neck has sometimes been found to subside very suddenly without any abatement of the fever, and then the testes have been as suddenly inflamed; which is attended with more pain and fever than the swelling of the neck, and is cured more slowly: upon this translation of the disease, bleeding is always proper, though these parts have never been found to suppurate.

A TRANSLATION from this part again, is sometimes very suddenly effected, and the irritation then generally falls upon the brain; and the worst consequences are justly to be apprehended. Every thing necessary and proper for the true phrensy is then speedily to be had recourse to, and the swelling

ling invited to the parts it has left, by the use of fomentations and poultices; and until that can be effected the patient will be in great danger. Such a translation, however, is much more common in *North America* than it is amongst us.

WATERY-HEAD.

THIS complaint is distinguished into the *external*, and *internal*; in the former the water lies upon the surface of the brain, but in the latter it is seated much deeper, within the little cavities, called ventricles, which are preternaturally distended. The *external* makes its appearance at, or it is said, in some instances, soon after birth; though it is certain, that children with this species are more commonly still-born. I have, nevertheless, known three arrive to full ten years of age, who were then unable to walk, or even to sit upright in a chair. From a late instance, however, I have learned, that when no symptoms of water in the head appear

appear at the birth, although the enlargement should be manifest very soon afterwards, and increase rapidly, the water is *sometimes*, at least, contained within the ventricles of the brain.

THE *external* watery-head, at whatever period it may commence, has always been esteemed a fatal, as well as most distressing complaint; but I have been informed, that where the disorder has not been very manifest at the birth, blisters on the head have sensibly diminished the bulk. These should be applied, successively, to different parts, especially along the top of the head, so as to keep up a constant discharge; which from the good effects in two or three cases, when had recourse to in good time, may possibly, in some instances, effect a perfect cure: at least, the advantages already observed are sufficient to justify the attempt, in a disorder hitherto esteemed incurable.

OF the *internal* watery-head it may be proper to treat more largely. It usually takes place between the age of two and ten years,
more

more rarely earlier, but sometimes later; and is a like melancholy complaint with the former. It may, probably, arise from falls and blows on the head; from scirrhus tumours and excrescences within the skull; a watery state of the blood, or a lingering illness. It, possibly, may sometimes be owing to pressure on the brain and fulness of the vascular system from other causes. I have, at least, lately met with one case, in which there were all the usual symptoms of water in the ventricles, and an eminent physician whom I met on the occasion was fully of that opinion, though it was afterwards manifest to be otherwise, and the symptoms owing to inflammation of the brain. As the disease may originate from such different causes, there can be no doubt that it may sometimes be a chronic disease, and its appearances very insidious; and this, indeed, appeared pretty manifest in a case I attended very lately. It appears, likewise, to be a family complaint in some instances; for I have known six children, born of the same parents, die successively of

it at the age of two years—Children with a large head do not seem to be more subject to this disease than other children.

THE attack is sometimes very sudden; but the complaint more commonly begins with the appearances of slow fever, especially in older children, with debility of the arms, and pains in the limbs; and frequently in the upper part of the neck. After a while, the child is suddenly seized with pain in the head, and generally in the fore part, and retches once or more; it becomes heavy and dull; can bear no posture but that of lying horizontally; the pulse becomes irregular, but usually very slow: in the progress of the disease the faculties and senses are impaired, and the eyes are offended by the light; the patient sees objects double, and becomes delirious. As the disease advances, the pulse grows frequent, the cheeks become flushed, the pupils of the eyes are dilated, the stools and urine come away involuntarily, and the patient lies sleeping, or is convulsed.

In the youngest subjects, I have known it
begin

begin with a cough, quick pulse, and difficulty of breathing, attended with circumscribed flushed cheeks as in teething, recurring on every little exertion, with continual fever and costiveness; and sometimes a discharge from the nose and eyes. Other symptoms indicative of the disease in very young subjects, are, a hand often put to the head, or lifted upwards, and waving about; vomitings; costiveness; expression of anxiety, and dislike to be moved; at other times, an unmeaning look, and marks of insensibility; the fingers often clinched, and hands tumid; drowsiness; picking of the nose, and grinding of the teeth during sleep, as in the case of worms: the eyes are in some cases impatient of light, in others, vision is so imperfect, that the child does not regard any objects however close to them; and before this period, one or both the eyes are in many instances turned towards the nose. The pupils are often not dilated till near the close of the disease, and such young patients sometimes hear and comprehend, and take food to the

last, and die suddenly upon the decline of the febrile symptoms, when they have been thought to be recovering. These and other symptoms, however, laid down as indications of water in the brain, are, in some degree, common to other diseases of children, especially the enlargement of the pupil and sleepiness, in fevers arising from foul bowels; which, I am persuaded, are sometimes mistaken for the fever of water in the head. In such cases, some children have been erroneously thought to have recovered from this disease, especially if calomel has been administered, though with another view, while others have perished from improper treatment, and mistaking their complaint. Perhaps, the most decided symptoms early in the disease (at which time it is of the most importance to ascertain it) are, an inclination to lie on the back, an unwillingness to be moved, and an increase of pain in the head upon being raised from a supine to an erect posture: but especially an almost constant drowsiness, and a tendency to fall asleep, after

after being rouzed by being lifted up, or otherwise disturbed. Sometimes, however, neither these, nor other decided symptoms are found to take place until the second stage of the disease.

THOUGH it is sometimes a very short disease, and at others, of many months standing, it seems always to be divided into three stages; which are best distinguished by the state of the pulse. In the first, the pulse is always quick as in other complaints attended with fever; in the second, it is slow, irregular, and often intermitting; and in the third it becomes again very quick, and usually regular. The urine frequently deposits a sediment of a light consistence, and white colour; and the breath has an offensive and sickly smell, especially in the last stage.

FROM what has been advanced, it is difficult to say if medicines are so often successful as hath sometimes been imagined; for when a patient recovers, it may be suspected he has not had the true disease. Practitioners seem chiefly to have depended on repeated

bleedings; purges with jalap, or calomel; blisters to the neck, or head, diuretic medicines, and the external use of mercurial ointment. A large bleeding early in the disease I have thought very beneficial, especially in children of a robust habit. The use of sternutatories, or powders to provoke sneezing, as the compound powder of asarum, or white helebore, have likewise been recommended by some experienced practitioners; and, possibly, with some little prospect of advantage, some children having recovered in consequence of a discharge of a thin fluid by the nostrils. With a view to promoting absorption, electricity has likewise been recommended: to all which I would add the application of a narrow caustic along the whole course of the head, instead of trusting to a small blister on the crown.

THOUGH I have made mention of mercury, I cannot say I have seen any decidedly good effects from its use, either as a purge or an alterative, (after the disease has been clearly ascertained;) administered either externally

ternally or internally, though I have had recourse to it very early as well as late in the disease. Should the use of it, however, be determined upon, in which ever way it may be advised, it should be assisted by diuretics: calomel is probably the fittest preparation for internal use.

THE external application of mercury has, however, been more generally preferred, as acting more powerfully on the system, and creating less disorder in the bowels. Some physicians have directed it to be used both externally and internally; and it may be so made use of very freely, as a salivation is not very easily raised in young children, especially in this disease.

THE fox-glove has very lately succeeded, in a boy of fourteen years of age, under the most unfavourable symptoms; and seems therefore, worthy of further trials. It acted merely as a diuretic, and induced no particular debility, though the patient could before swallow nothing but with the greatest difficulty, owing to a spasm, or palsy of the

U 4 gullet.

gullet. The medicine was given in a strong spirituous tincture: but in any form, should be administered only under the eye of some intelligent practitioner.

As I am always happy in the opportunity of reflecting any light upon obscure diseases, I shall close these means of cure with some observations from the most recent publications.

Dr. RUSH is decidedly of opinion, that the commencement of this disease is always truly inflammatory, and speaks of great success in treating the complaint agreeably to this idea: he advises,

1st. Bleeding, which in some cases he directs to be repeated several times in the first stage of the disease.

The second remedy in this stage is, purging, plentifully and repeatedly; to which he was first encouraged from the benefit derived from that remedy in palsies, and other cases of congestion in the brain.

3d. Blisters to the head, neck and temples, for the relief of the pain in the head; which
are,

are, therefore, proper in any stage of the disorder.

4th. With the like view, linen cloths, dipped in cold vinegar, or ice-water, and applied to the forehead.

5th. Mercury, particularly calomel, as a purge, in any stage; but mercury in larger quantities, as a stimulant, as soon as may be after the inflammatory action of the system is sufficiently subdued by previous evacuations, or otherwise. Bark, wine and opium, he says, promise success only in the last stage of the disorder, assisted by mercury, where the state of the system may call for them.

If we may place much confidence in these observations of Dr. RUSH, whose theory appears to be supported by plausible reasoning and the history of several successful cases, some further light seems to be thrown upon this dangerous disease; and the indications for the cooling plan, particularly bleeding, and the proper use of mercury, pointed out with somewhat more precision than hitherto.

THE intentions of cure as laid down by Dr. PERCIVAL are very similar to the foregoing, being calculated, he says,

To mitigate the pain and spasm;

To promote absorption; and

To increase the ferous excretions.

WHEN the pain and spasms are considerable, he advises opiates in large and repeated doses, unless there be great sleepiness, and in that case, he substitutes musk combined with salt of harts-horn. He directs repeated blisters to the head, and recommends joining the fox-glove with opium and calomel. If the mercury be disposed to run off by the bowels, he guards it further by opium.

As a preventive, where several children in a family may have suffered by it, some writers have advised a caustic to be applied to the nape of the neck. And other physicians have thought, that the progress of the disease has been stopped, after threatening symptoms had taken place, by covering the whole crown of the head by a blister, and keeping the sore open for a year or more; of the good effects

effects of which, I think, I have seen one instance, in a family where the complaint had been three times fatal.

GENERAL OBSERVATIONS *on the* SMALL-POX
and MEASLES, *with* CURSORY REMARKS
on INOCULATION.

IT will scarcely be expected, that I should treat distinctly of these diseases in their several varieties, being in no respect peculiar to childhood, nor of a nature to demand a full investigation in a work of this kind; and are noticed only to point out a few principal indications, and to introduce some practical observations in regard to Inoculation.

THOUGH the SMALL-POX is a complaint so incident to the early part of life, that comparatively few children living to the age of eight or ten years, are found to escape it, yet it is not so readily communicated, in the state of *early infancy*, as hath been generally imagined,

imagined, unless by immediate infection*.

THE poor furnish frequent instances of the
truth

* Some evidence of the propriety of this assertion may be gathered from the consideration of there always existing a far greater number of infants within the month, than of children of any other age; and for the like reason, a greater number of those under a year old, than of such as are two or three years of age. For it is evident, that every infant dying at the early periods, must reduce the number to which those of the more advanced ages might otherwise have amounted; whereas, all the children who arrive to two or three years of age, having been first infants in the month, and of one year old, the number of the latter periods is not diminished by the death of those of a more advanced age. Now, every one knows how very few infants he has heard of who have received the small-pox, naturally, in the month, or even within the year; though fewer of these are inoculated than of children above a year old. And this exemption from the natural small-pox does not seem to arise from their not being exposed to the ordinary means of contagion, especially among the middling and lower ranks of people who form the bulk of mankind; since the medical men who usually attend such lying-in rooms, are very much in the habit both of visiting patients in the small-pox, and of inoculating, all the year round: and even in the higher ranks of life, if gentlemen in the general practice of physic

truth of this observation. I have attended where children born in an air, saturated as it were, with the miasma, (or infectious particles) of this disease, (as well as of the measles) and even lying continually in a cradle in which another child has died a few days before, have, nevertheless, escaped the disease, and sometimes, when they have slept together in the same bed with one loaded with it. Hence it appears, that highly tainted air, and even personal contact, are often insufficient to communicate the poison. Yet we know that infants are very easily infected, receiving the small-pox by inoculation as readily as adults; though neither are at all times equally susceptible of it*. Perhaps
this

may happen to be consulted, the chance of their visiting at the same time infected patients, is not so small as may be imagined; not to speak of the probability there is, that some one of the numerous visitors, during the month, may by accident or otherwise, have been in some infected house in the course of the day in which their visits may be made.

* Dr. YOUNG inoculated several children at the Royal Infirmary at *Edinburgh* at about a week old; yet in none
of

this latter circumstance may not always be sufficiently attended to; the mode of inoculation being often blamed, when its failure may be owing to the adverse habit of the child. Possibly, on this account, it may not be perfectly safe to urge it, at such a time; at least, instances are not wanting, where twice introducing the matter having failed, an infant has had the disease very severely, and even fatally, upon its being repeated a third time.—In no other view, I imagine, can the repetition be accounted hazardous; and this holds out encouragement to such as from any uncertainty in regard to infection, may wish to be inoculated once or more; a young person, we are told, having been inoculated every fortnight, for a whole year.

of them could he perceive the infection to take place. And a respectable physician lately informed me, that he knew a young woman to be inoculated eight times in the course of thirty days, who also at the same time attended several children who had the small-pox from inoculation, and yet was not infected herself. She, nevertheless, caught that distemper about seven weeks afterwards, and died of a confluent sort.

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The first of these operations communicated the disease, and the subsequent ones in no wise injured his health.

BUT in whatever way the small-pox or measles may take place, they are to be treated as in adults, with but little other difference than what every regular practitioner, at least, is well acquainted with, that of greater caution and tendernefs; as infants cannot bear the powerful lowering and cooling regimen and evacuations, often proper for the other.

IT may just be observed, however, for the information of readers little acquainted with the disease, that in the mild distinct small-pox the eruption does not appear till the fourth day, inclusive from the attack; but in the severe, confluent kind, (in which the pustules run into one another) on the third, and even sometimes early on the second day. In the former also, the fever and other complaints usually vanish upon the eruption appearing on the skin, whereas in the confluent, however it may abate for a short time, the fever is rekindled, and increases

creases with the progress of the disease. There are likewise some peculiarities in regard to young children, both in the mode of attack, and in the symptoms attending the latter stage of the disease, which may be slightly noticed in this place. The vomiting, shivering, and pain in the back, and head, being rarely succeeded by a sweat in infants, and is far less common in all young children than adults, under any of their complaints, and is less commonly salutary, or critical. In the progress of the disease there is likewise as frequent a difference, children having usually a purging in the bad confluent sort, in the place of that salivation which usually appears in adults. These circumstances, as well as their tender age, will call for some little diversity in the treatment. But as in the mild distinct small-pox very little is required but to keep children cool, and give them plenty of diluting drinks, until the eruption is completed; so in the bad confluent kind, the indications are too various, and often perplexing, for the most intelligent

intelligent of my readers who have not made the profession of medicine their study.

IN regard to the MEASLES it needs only to be remarked, that children ought to be kept in bed, and not only their bowels kept open throughout the disease, and cooling medicines, and diluting drinks be administered, but unless they are very young, they will bear and even require one or more bleedings, at any period of it when the symptoms (particularly, much cough or fever,) indicate its propriety. And, indeed, the cure of the secondary fever, and cough, however long they may continue, will turn upon repeated bleedings, laxatives, and a total abstinence from wine, and all animal food—A caution that I wish strongly to inculcate upon parents.

I have now only to drop a word or two more on the subject of *Inoculation*, and principally, because parents are very apt to fall into great mistakes respecting the age, and circumstances most proper for this operation.

It is too common an opinion that a very young infant, sucking at the breast, is the fittest subject for inoculation, and medical people have some difficulty in persuading parents to the contrary. Children are then said to be clear from humours, their blood mild and balsamic, their food innocent, and their minds free from all violent passions. But all these advantages may be counterbalanced by the delicacy of their frame, their disposition to spasm, and their inability to struggle with a severe attack of the disease, if it should chance to fall to their share. And such, indeed, are the facts: infants usually have the small-pox very lightly, whether taken naturally, or from inoculation, though in both there are a few instances of their expiring in a fit at the time of eruption; and they seldom get through the disease, if they are full, or it proves of the confluent, or malignant kind. And this furnishes a peculiar objection to inoculating infants at the breast, which arises from their necessarily lying so much on the arm of the suckling mother,
or

or nurse, especially in the night; the heat exposing them to a much more copious eruption, than children who are weaned. This I have seen clearly exemplified in the instance of a child whose mother could suckle only with the right breast; the consequence was, that the left side of the child was perfectly loaded with the eruption, (though the pock was of the distinct kind) whilst the other had only a moderate sprinkling. The child, however, sunk under the secondary fever at the end of five or six weeks, though turned of two years old; the *only* child I have known to die of inoculation at so advanced an age.

I AM aware that many children are inoculated very young, and even in the month, and generally with very good success; but the frequency of this practice, among eminent surgeons, is owing to the urgent solicitation of parents, and their fear of contagion. I cannot therefore avoid saying, that however few may die under inoculation, under any circumstances, the fact is, that the far greater

X 2 proportion

proportion that I happen to have had an account of, is amongst infants under six months old. A remarkable proof of this disproportion appeared lately under a general inoculation at *Luton*, during the progress of a malignant small-pox, which carried off one half of those who were attacked by it in the natural way. In the midst of this fatality, twelve hundred and fifteen paupers were inoculated, through the humanity of the present Bishop of *St. David's*, many of whom refused all preparatory medicines, and were besides addicted to the use of strong liquors: nevertheless, out of the *twelve hundred and fifteen*, only *five* died—all of whom were infants under four months old. Seven hundred adult people of better condition, in the same neighbourhood, were inoculated a short time afterwards, and with the like good success with the former.

FROM this view of the matter, it is pretty evident, I think, that this operation ought, in general, to be postponed to a later period; which is pointed out by the child having cut
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all its first teeth. To which may be added the observation just made, that infants are not much disposed to take the small-pox naturally; and that more than fifty children die under the age of two years, of other complaints, to one that dies of the natural small-pox. Should it, however, be in the same house, or prevail in the neighbourhood, and the parents find it difficult to remove the child out of the way, it may run a less risk in being immediately inoculated, as that operation is now so well understood, and successfully conducted, than by taking the chance of escaping the infection, or of recovering from the disease, if it should happen to take place. I shall just observe, however, on this head, that the late PROFESSOR MONRO seems to recommend the use of a bath of water and juniper-berries, and fumi-gating the chamber with the juniper-tree, during the course of severe small-pox; which is said to have succeeded in eight or nine instances as a preventive.

THE inoculation of pregnant-women
X 3 being,

being, in certain instances, dangerous to the infant, it is presumed, that it cannot be totally foreign from the subject, to annex a caution on that head; it having until of late been generally imagined, that the child is not infected by the parent passing through the small-pox, whether from inoculation, or otherwise. It is, indeed, comparatively rare, that the unborn-fetus takes the disease, howsoever severely the mother may suffer by it; yet from very accurate accounts of this matter lately published, the fact is established as the result of much experience and reflection, where the parent has been infected after the sixth month of gestation. Previous to that period, however, the infant (whatever be the cause) has very seldom been known to take the disease; and later than that, it is presumed, few mothers would be inclined to submit to the operation, unless from some urgent necessity. The parent, it is added, is not in much additional danger from being inoculated in a state of pregnancy, unless the disease should prove considerably more severe

vere than it is ever expected, from inoculation; but when communicated to the fetus, the infant always dies.

CHICKEN-POX.

THOUGH this disease is usually a very light one, it merits a few words, not only because more incident, perhaps, to children than to adults, but also that parents are often at a loss to distinguish it from the mild small-pox; which it sometimes exceeds in violence, and is now and then even attended with danger. This is, indeed, so uncommon, that the disease has been very seldom noticed by medical writers; and even Dr. HEBERDEN, who was among the first that obliged the public with a distinct account of it, says he never saw any person with so many as three hundred pustules over the whole body. Physicians, indeed, as he observes, are not often called to visit patients under a complaint usually so trifling, or a gentleman of his long and extensive practice, would have met with

instances in which it must have appeared of more consequence, as will presently be noticed.

It is from this disparity, I apprehend, that this disorder is sometimes denominated the swine-pox, which is only a ranker species of the disease, in which the symptoms may run higher, as well as the pustules become much larger, and more maturated. In this case, I have known the head and face as much swollen as I have ever seen them in any distinct small-pox, however full, and the pustules containing a yellow matter, with highly inflamed bases, and exceedingly sore; and these have formed a complete mask on the face, after the turn, as is often seen in the small-pox. One such patient whom I was called to visit, was about sixteen years of age, of a full habit, but very healthy; and what makes it very certain, that this complaint could not be the small-pox, is, that the young gentleman died of that disorder a twelvemonth afterwards, and possibly owing to its being neglected in the beginning, from an idea that
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the former illness had really been the small-pox. The latter mistake arose from an improper answer having been then made to my inquiry after the day on which the eruption had first appeared, (as I was called to make him only one visit, when the pox was on the turn;) a mistake the young gentleman's mother had a perfect recollection of after I was gone, and of which I reminded her upon being called to visit her son in the small-pox, only the day before his death.

THIS case strongly verifies the remark of Dr. HEBERDEN, that this complaint can, in some instances, be distinguished from the small-pox only by its quicker progress towards maturation, and the shorter duration of the pustules; a watery vesicle always appearing on the second or third day from the eruption, and the turn, at the furthest, taking place on the fifth.

THE Treatment of it differs nothing from that of the mild, distinct small-pox; but it more rarely calls for much attention, and only when a patient may have it very full.

AGUE.

AGUE.

THIS is a complaint so well known, that it seems unnecessary here to enter minutely into a description of it. It is sufficient to say, that it consists of repeated cold and hot fits regularly succeeding each other, with one or more well-days between them; in which interval the sick passes a high-coloured urine, that deposits a red sediment.

It, perhaps, partakes more of a nervous affection than other fevers may do, and is known to be endemic, (or resident) in some flat marshy situations, but is most frequent in the spring and fall of the year; in the former of which it is generally easily cured, and is even sometimes salutary. Autumnal agues, on the other hand, especially in the country, and amongst very poor people who feed coarsely, will frequently continue a long time, and return again the next autumn; whereby the constitution becomes considerably impaired. In such instances the legs are
apt

apt to swell, and more especially the belly, which becomes hard, particularly on the left side, and has been termed the ague-cake. This tumefaction, however, instead of being a bad sign, as might be suspected, is a very favourable one, and indicates the recovery of the patient. The hardness is probably owing to an infarction of the spleen, (or melt) and usually subsides in the course of a few months, especially upon the use of moderate exercise, and a generous diet. It may be prudent, however, to administer small doses of calomel, and afterwards light bitters, adding likewise chalybeates, if the habit of the patient seems to require them, and there are no symptoms of a morbid affection of any internal part.

It were needless to enter largely into the subject, and it is equally foreign from the present intention, to be more particular in regard to the cure of this oftentimes very troublesome complaint, as it would lead me further than would be compatible with the design of the work. Some notice of it, however,

ever, is taken, because, though no more peculiar to children than the last mentioned diseases, yet it may be said, that there are comparatively very few children who have not suffered by it during the years usually passed at school.

THE ague, indeed, attacks every age, so that infants even under a year old are very liable to it, whenever it rages among adults. It is with a peculiar view to patients of the former class that the following directions are given, the bark being as much a specific for older children as it is for grown people; but it is generally proper first to administer a vomit, and one or more doses of physic, as well as sometimes to assist the bark by the addition of aromatics, or steel.—The small-pox, whether taken naturally, or by inoculation, as well as other acute complaints has sometimes removed obstinate autumnal, and chronical agues.

IN a state of infancy, the ague is often owing to, or connected with a foul state of the bowels and obstruction of the gall-ducts,
and

and is frequently accompanied with worms, or such a state of the bowels as affords a proper nest for them.

THE more common, or third-day ague, at this age generally yields to purges of the powder of scammony with calomel, or calomel and rhubarb, given on the days between the fits, and small doses of Dr. JAMES'S powder on the return of the fever. Should this fail, a vomit should be administered an hour or two before the next cold fit is expected, if the powder should not already have had that effect.—A linen waistcoat with fine powder of bark quilted within it, may be worn by infants next their skin. But a more expeditious remedy is a large poultice of Peruvian bark, put between thin linen, and applied warm to the region of the stomach, and renewed through the day as often as it may get cool.

IN older children, the common saline draught, taken once in six or eight hours, will frequently succeed; as will warm bit-
ters, and medicines that promote and keep
up

up perspiration ; but if these should prove insufficient, the bark, it has been said, will be proper. Crude salt-ammoniac also in the dose of ten or twelve grains, for children of five or six years of age, has sometimes cured this troublesome complaint ; but may not be proper for delicate constitutions. Myrrh is a better remedy for such, given from four to eight grains, before, or during a cold-fit, and as much cream of tartar, every two or three hours, during the fever. Pepper, and likewise alum are common quack remedies, and may be frequently given with success at this age ; the former from five to ten grains, the latter from three to five, joined with the like quantity of nutmeg, three or four times a day in the absence of the fever.

AMONGST popular remedies*, is a teaspoonful of white resin in fine powder, mixed

* It is hoped, that the very great obstinacy sometimes observed in this complaint, as well as a desire of enabling readers to assist their country poor, will be admitted as an apology for this and other similar passages met with in this work.

with

with the like quantity of pounded loaf-sugar, taken a little before the cold-fit, and repeated afterwards night and morning. Poor people, or such as live in the country at a distance from medical help, may make trial of it with safety, and with as good prospect of success as any other remedy I know of, having found it successful even where large doses of the bark have failed. Bracelets of mustard-seed and garlic may likewise be applied to the wrists and ankles, and will sometimes have a good effect. Such kind of remedies for this disease are numberless; I shall, however, mention another, which, though as simple as any, seems to have been very often successful, (as I have been informed by the late Dr. HUCK SAUNDERS, as well as others;) and is nothing more than the spider's web, rolled loosely up to the size of a child's marble, and washed down with a little warm wine and water, or chamomile-tea, before the cold fit is expected: the child should then be put into a warm bed, and perspiration be encouraged. This
may

may be done, amongst other means, by fomentations to the pit of the stomach. A piece of bread, hot from the oven, and sprinkled with camphorated spirit, is not a contemptible one, in this and other complaints, where a speedy perspiration is wished for.

I SHALL close the list of remedies with the following, which is a very good one for patients no otherwise averse from the bark, than that the stomach will not bear it in large doses.

TAKE of fresh saffrafras bark, Virginia snake-root, rochallum, nutmeg, calcined antimony, and salt of wormwood, of each one dram : to these, well rubbed together into a fine powder, add the weight of the whole of the best Peruvian bark ; then add three or four drops of the chemical oil of mint, and with syrup of saffron make all into the consistence of an electuary. This is to be divided into twenty-four doses, one of which may be taken by children of eight or ten years of age, every four or six hours, while

while the patient is awake. To make this or any other preparation of the bark sit easy on the stomach, the patient should first eat a bit of bread, or other light food, with which it may mix, instead of being received into an empty stomach, whereby it frequently nauseates.

GENERAL OBSERVATIONS *on* COUGHS.

PREVIOUSLY to treating of the whooping, and what I have termed the spasmodic cough, it may be proper to premise some slight observations on coughs in general; a complaint in children that we are often consulted for. It is, indeed, always of importance to be able to make proper distinctions in this affection, as it accompanies divers complaints, especially in infancy; and is sometimes a very harmless attendant, while at others, it is of the greatest magnitude, and calls for its appropriate treatment from the beginning.

FROM what has been said in different parts of this work, it will be very evident, that a

cough is not always to be considered as the original complaint, like the whooping-cough, any more than a direct consequence of a cold, or of specific affection of the lungs, as in the measles. Where it may happen to be so, enough, it is presumed, has been said under the head of fevers; and the whooping and spasmodic coughs will be presently treated of distinctly. The intention here is only to afford satisfaction to those who might expect to meet with some observations under this head, by reminding them, that a cough often attends teething, and some bowel complaints, or a foul state of the stomach, as well as a common cold, and inflammatory and other fevers, (which they are, however, apt to suspect whenever children are attacked with a cough;) and is a recurring symptom in many delicate habits. Very slight occasions are oftentimes sufficient to excite it in such children, whether from a frosty or damp air, or from any little illness that has reduced the strength, and particularly if the child be of a scrofulous habit. Every confirmed glandular

glandular affection will, indeed, be attended with a cough, which in that case is of the worst kind, as it is accompanied with fever, loss of strength and manifest disease; in the last stages of which the cough becomes permanent.

In every case, therefore, the cause and attendant symptoms, rather than the mere cough, should be carefully considered, and especially if the child be costive, or the bowels foul, and their discharges of an unusually offensive smell. Purging medicines, it has been before said, are in this case the proper remedies, which should frequently be joined with saponaceous ingredients, such as the water of kali, prepared natron, or the burnt sponge; nothing being more common than an obstinate and teasing cough, especially during the night, when the bowels have been long in a costive state, and their discharges are very fetid, or of a stiff and clayey consistence. As opiates in such cases must be peculiarly noxious, the strictest prohibition of them should be enjoined, lest the

constant recurrence of the cough during the night, should tempt nurses (as it often has done) to administer even syrup of poppies, though the mildest of that class; since by increasing the constipation of the bowels, it will not fail equally to increase the disease.

HOOPING-COUGH.

THE following concise history of this formidable disorder, may be acceptable to the more intelligent and inquisitive reader, which was unknown, probably, to the old writers, and is supposed to have been conveyed into *Europe* from *Africa*, or the *East Indies*: the *Greek* and *Arabian* physicians make no mention of it, and indeed it has not been well understood in any part of *Europe*, till of very late years. Hence, probably, its great fatality in *Stockholm*, where from the year 1749 to 1764, inclusive, 43,393 children are reported to have sunk under it. Even our countryman, WILLIS, supposed its seat to be in the breast, but HARVEY makes it a disease
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of the stomach, and ASTRUC an inflammation of the upper parts of the windpipe and gullet, produced by an original affection of the former, from indigestion. He seems to have been one of the first that discarded the use of oily and pectoral medicines, (which, indeed, some practitioners have been weak enough to revive;) though he advised bleeding too indiscriminately.

THIS disorder furnishes another proof of the observation made on the impropriety of submitting the complaints of children to improper hands—the care of old women, and frequent change of air, being all that this disorder is, by some people, thought to require*: but perhaps the maxim was never worse applied, as may be evident from the

* If this be true to any degree, so that children, with very little assistance from medicine, have seemed to get rid of obstinate hooping-coughs, by removing from one air to another; it is not improbable, that this may have arisen as much from getting out of infected beds and apartments, which might keep up the contagion, through the medium of respiration, as from any specific influence of the air, resulting merely from a change.

above history of the disease. There is, indeed, a milder sort of hooping-cough, (as there is of every disorder) which calls for very little medicinal assistance; and it is always in such cases, that matrons and old nurses acquire their credit. But there is no complaint of children with which I am at all acquainted, in which medicine is at times more evidently serviceable, than in a bad hooping-cough.

THIS disease is certainly highly infectious, and one of those that never appears a second time. It may attack at any age, adults being liable to its influence, as well as younger people; but it more commonly takes place between the age of four months and twelve years. It often begins as a common cough, and is attended with the usual symptoms of having taken cold, but in its progress soon becomes more severe; though the longer it may be before it plainly discovers itself, by the *hoop*, the more favourable it is likely to be. The fits of coughing are attended with a peculiar noise, not ill-expressed by the term *hoop*, and is sufficiently known to every parent

rent who has ever had a child severely attacked by it, and to whose feelings, it proves one of the most distressing complaints their children are liable to. A flux of rheum frequently comes from the mouth, nose, and eyes, and the food is thrown up, together with a viscid phlegm, (often in great quantities) in the coughing fits; between which the child generally appears to be perfectly well, and eats its food very heartily. These are the more common symptoms, but when the disease is violent, and has continued for some time, they become greatly aggravated, especially in the night, and the child will seem almost strangled in each fit, the face and neck becoming perfectly livid, till by a violent effort, attended with a hoop, it recovers its breath; the blood will likewise sometimes rush from the nose and mouth: and I have in two or three instances seen the eye-lids as black as if injured by a violent blow, and remain so as long as the cough has continued severe. When taken in time, however, and properly treated, the whooping-cough is rare-

ly fatal, and scarcely ever but to young infants; and never as long as the patient keeps free from fever.

It has been thought by some practitioners, that little more than emetics, and gentle laxatives are required, in which view it was, that the late Dr. JAMES recommended his powder; though some people of late have very imprudently wished to discard the former altogether. But the fact is, that many other means are equally useful, and not unfrequently indispensably necessary, unless we should suffer the patient to be strangled in a fit of coughing, or fall into a decline, from the injury which the lungs must endure by a frequent repetition of such violence.

THIS must be exceedingly apparent from the above account of the disease, the various symptoms of which, certainly demand a considerable diversity in the treatment. The more important ones are, the state of inflammation, sometimes inducing inflammation of the lungs; the quantity and visciduity of the phlegm; and the spasmodic affection,
and

and danger of suffocation; together with the exhausted state into which the patient may be reduced by the long continuance of the disease. If the breathing therefore be difficult, a blister is indicated, which, if the child is not very young, may be kept open for two or three weeks; or, what is sometimes preferable, the repetition of a small one, once in six or eight days. If the face should be very livid, and swollen, during the fits of coughing; if any vessel give way; or the patient be robust, and more than two or three years old; or should be hot between the paroxysms, a little blood ought to be taken away, (which is sometimes inexpressibly useful,) and a saline draught be administered, every six or eight hours, and the bowels kept open, till the fever shall disappear. Otherwise, if none of these symptoms attend, bleeding does not seem, in general, to be indicated, nor much purging, but may rather have a tendency to protract the disease, by increasing the spasmodic disposition, and by weakening the patient.

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IF there be an inclination to vomit, it ought to be encouraged, unless the phlegm be brought up with great ease in almost every fit of coughing; in which case, nature seems able to accomplish the business herself, and it will then oftentimes be sufficient to keep the body open by the mildest laxative medicines. But it very rarely happens, unless in infants at the breast, that some kind of emetic is not necessary in the first stage of the complaint; and is often necessary even for the youngest of them. The disease, indeed, frequently requires no other medicine; for such usually keep the body open at the same time, which it ought always to be, but not to such a degree, it has been said, as to weaken the child. For this purpose, tartarised antimony, or its wine, are as proper an emetic as any, when they answer the end. Two grains of the former dissolved in two ounces of water, with the addition of a little sugar, is a medicine to which children will never make any objection. From one to two tea-spoonsfull, given to a child of a year old,
(varying

(varying the dose according to the age) will in general act sufficiently; and may be given upon an empty stomach, every day, or every other morning, according to the strength of the child, and degree of disease. If the cough should happen to be more violent at any particular time, the emetic should be given a little before the fit is expected. Or perhaps a still better method, particularly in very young children, is, to give the tartarised antimony in smaller doses, together with a few grains of magnesia, or prepared oyster-shell powder, (according to the state of the bowels) three or four times a day, so as to keep the stomach in such an irritable state, as shall secure a gentle puking every time the fits of coughing come on. But in whatever way this medicine be directed, it will prove of no service if it does not excite vomiting, and must therefore be given in a dose suitable to the strength of the stomach, which is exceedingly various, not only at different ages, but in children of the same age, and of the same apparent habit of body.

body. If one preparation of antimony may have any advantage over another, they have all much more over every other emetic I have made use of; the ipecacuanha, and oxymel of squills, being exceedingly unpleasant, and the latter, as far as my experience goes, usually more uncertain than any other emetic.

SUCH a plan is all that will be necessary in the common hooping-cough; but it has been said, there are many cases which will require other means, and demand all the skill of the experienced physician. The cough, for instance, will sometimes increase not only for days, but for weeks together, and the strangulation be exceedingly alarming. In this case, the milk of gum ammoniac, but especially asa foetida, frequently proves a sovereign remedy, and though exceedingly nauseous, many children will take it tolerably well for the short time it appears to be absolutely required; and when they will not, it may be administered by way of clyster, dissolved in two or three spoonsfull of pennyroyal, or common water. These medicines, however,

however, will be improper in the very advanced stage of the disease, when attended with hectic heat, hemorrhage, or other pthysical symptoms; a caution equally necessary in regard to the bark, which in the absence of these symptoms, and after the stomach and bowels have been well cleansed, is frequently very useful at the latter stage of the disease, when the patient has been exhausted by its long continuance. Upon the same plan with the *asa foetida*, camphor and castor are frequently beneficial, and have the advantage of being less nauseous, but I think are proportionably less powerful.

It will sometimes be of no small service, to rub the hands, and the soles of the feet, with the compound spirit of ammonia, several times in the day; or the spine of the back, and the pit of the stomach, with oil of nutmeg, or oil of amber; but as the smell of the latter is very unpleasant, it may be dispensed with, where the spasms are not exceedingly urgent. But when they are so, this oil is sometimes very useful, particularly

larly when administered internally, and children of three or four years old will take a few drops of it very well, mixed in a spoon with a little Lisbon sugar; from which I have seen as evident advantages, as from any medicine whatever. In a little child of my own, it immediately gave a turn to the complaint in the most violent whooping-cough I ever met with, and after almost every other medicine had been tried to no purpose; so that from the hour she took it, the complaint was no longer alarming, nor tedious of cure. But frequently, no antispasmodic is equal to opium, in this, as well as in other diseases. With this view, to children of four or five years old, three or four drops of laudanum, or if a pill be preferred, a grain or two of the storax pill, and to younger children a small teaspoonful of syrup of white poppies, taken at bedtime, will not only quiet the cough, and remove the strangulation during its operation, and procure the patient some rest, by which the strength will be recruited, but in
many

many cases, seems to have a kindly operation on the disease itself. It is in this way, I doubt not, that the hemlock has gained so much reputation, but I believe, is no otherwise a remedy for it than as an anodyne. From a mistake, however, in this respect, the strong manner in which this medicine has been recommended has certainly done harm; as I have known people depend solely upon it in very bad cases, to the exclusion of other remedies evidently indicated, which would, at least, have shortened the disease. Joined with emetics and other means, as the symptoms may indicate, it is, nevertheless, a valuable medicine.

IF obstructions in the lungs be suspected, blisters should be applied, and recourse had to other remedies; but at this period, the cure is chiefly to be accomplished by perseverance in cooling laxatives, by a vegetable and milk diet, (especially asses milk) pure air, and gentle exercise.

THE cough after having disappeared for a week or more, is sometimes found to return

turn with great violence, especially upon taking cold; but a gentle purge or two, a vomit, and abstaining from heavy food, generally remove it in a very short time. Should this fail, a grain of *asa foetida* taken, two, three, or four times a day, according to the age of the child, never fails to check it immediately. If these cautions should be neglected, the cough will oftentimes prove extremely tedious.

THE only thing that remains to be spoken of, is the proper diet, which is, indeed, of great importance, and for children even of five or six years of age, ought to be little more than milk and broths. These are easily digested, and will afford them much more good nourishment than any kind of meats, and will sit much lighter on the stomach than puddings or pastry; the latter of which is exceedingly injurious. The objection made by old nurses against milk, that it breeds phlegm, is utterly founded in a gross mistake that cannot be too frequently controverted. Should the milk, however, be found to cur-
dle

dle remarkably soon on the stomach, a little common salt, Castile soap, or testaceous powder, may be added occasionally ; or where it can be afforded, asses milk may be substituted for cow's. These light nourishments soon pass out of the stomach, or if brought up by coughing fifty times in the day, (as I have known them to be) a child of four, or five years old, will immediately take more of them with avidity, and will be better supplied in this way, I mean, by taking a tea-cupful at a time, than by making set-meals, or taking a large quantity at once. If the child should be thirsty, a little apple-water, toast and water, tamarind-tea, and other thin drinks, will be pleasant and useful. Patients treated in this way, will get through the complaint, if not severe, in a very short time ; and where it proves violent, a child will struggle through this long disease, without any considerable loss of strength, or will be very soon recruited by a decoction, or cold infusion of the bark, together with gentle exercise and country air, the best re-

storatives after every kind of disease. Such at least has been my own experience in this tiresome complaint, by which, I know, parents are usually as much alarmed as by any incident to childhood. But unless it has been long neglected, has taken place in the month, or is joined with some other disorder, I have never experienced it to be fatal, and then only in one instance, (where I was called only a few days before the child died) though I have known eight or nine children in a family labouring under it at a time: and I mention this as an occasion of consolation to those who may have been led to think more seriously of it.

SPASMODIC-COUGH.

MUCH akin to the former complaint, is a troublesome cough, properly enough denominated spasmodic, or convulsive. In a certain state of the air it is sometimes very general, and young children, and even infants in the month, are then attacked by it, as well

well as adults. The irritation seems to be about the superior parts of the throat, and is exceedingly distressing, at the time of coughing; but the patient, though an infant, seems immediately afterwards to be quiet and comfortable. This cough is not usually attended with fever, nor other ordinary symptoms of a common cold, nor is it to be relieved by the like means; the cough remaining dry and hoarse under the use of pectoral remedies.

CHILDREN of two or three years old may be cured by the hemlock, and gentle laxative remedies; but the former being less adapted to infants in the month, such may take a few drops of the syrup of white poppies, three or four times a day, and their bowels be carefully kept open; which means seldom fail of removing the complaint in three or four days.

I HAVE met with this complaint very frequently in children from two to four years of age, in some of whom it had been of several weeks standing, and after various

remedies for coughs had been made trial of. In every instance, the complaint has been immediately relieved by the hemlock, and in a week or ten days, been usually removed.

THERE are, however, some more formidable cases, in which the symptoms are greatly aggravated, and children continue longer in a convalescent state. I have also been called to visit some under all the semblance of approaching death, with profuse sweats, rapid and feeble pulse, and laborious respiration; supposed by able physicians to be sinking fast under the spurious peripneumony, or the more aggravated symptoms of a true pleurisy.

ALTHOUGH reduced to this state, under the best conducted cooling plan, yet has a recourse to hemlock succeeded equally well, giving immediate relief to all the symptoms. But a degree of difficulty of breathing all along merely spasmodic, having, in some cases, still continued, it has after a week or ten days, been found expedient to have recourse to the bark. At the same time, the violence

violence of the cough attended with very copious secretion of phlegm, which young children seldom spit up, has required two or three gentle emetics, which have then not failed having a happy effect; though administered previously to the hemlock, I have known greatly aggravate the symptoms, probably, by increasing the debility, and disposition to spasm.

As many practitioners not very conversant with this complaint under its more aggravated appearances, have been led to consider it as inflammatory, so others, from the continuance and violence of the cough, have expected it to terminate in the whooping-cough, but have been equally mistaken; this being a distinct species of spasm, and never attended with the true *hoop*.

THE CROUP.

THE Croup, or acute asthma, is a complaint somewhat similar to the two former, to which, perhaps, children only are liable,

called, therefore, the spasmodic asthma of infants. But this complaint has been greatly mistaken both by writers and practitioners, there being, certainly, two species of it, the one acute, or inflammatory, and the other chronical, or spasmodic. The latter rarely attacks those who have arrived to the age of ten or twelve years, and chiefly seizes infants newly weaned; and is then the most severe.

REMOTE causes of this disease may possibly be the lax fibre of children, the abundance of moist humours natural to them, and the vast secretion from the air-vessels in the lungs; and perhaps the change of food from milk, which is easily assimilated, to one requiring more digestion.

THE mean of prevention, is the same as in most other diseases peculiar to children. If this complaint arise from the laxity of their solids, the quality of their food, and the natural weakness of their organs of digestion, the general means of prevention, as well as of cure, will be readily indicated.

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Their food should be such as may be easily digested, and may prove nourishing. A due proportion of milk and broth, (taken either separately, or mixed) whilst children are very young, or light meats when they become older; good air and exercise, and a careful attention to the state of their bowels.

THE immediate CAUSE of this complaint is a morbid secretion of a viscid mucus in the wind-pipe, adhering so firmly to its sides as to impede respiration. The quantity and visciduity increasing, gradually lessens the diameter of the part, and if it effect this to a considerable degree, the disease must necessarily prove fatal.

THE SYMPTOMS of this complaint are spasmodic, being such as would be produced by any other matter constantly irritating the wind-pipe, and diminishing its diameter. They will therefore very much resemble those of the nervous asthma, but the complaint differs materially from the common spasmodic asthma of adults, in the peculiar croaking noise made in respiration, (from

whence it has its name) and in the violence of the attacks; which, however, when the disorder is light, leave no apparent indisposition, save a certain dulness, and a sense of fear, in children capable of expressing it. The fits frequently terminate by sneezing, coughing, or vomiting, and return without any regularity. It is at other times attended with a quick pulse, laborious breathing, a sharp, and shrill voice, and a flushed countenance, which grows livid during the fits.

THE disorder is probably inflammatory in the beginning; and though this period in many instances seems to be short, yet if the physician be consulted as soon as the disorder may be ascertained, an immediate bleeding might be useful. But after the *croup*, as well as difficult respiration have thoroughly taken place, it would be improper to have recourse to that evacuation, unless by leeches to the part, (which, indeed, will be sometimes very expedient) or where the usual signs of inflammation may be very unequivocal.

DR.

DR. MILLAR, who has written largely on this disease, (I apprehend, as it appears in *Scotland*) divides it into two principal stages; in the latter of which no method of treatment has appeared to him to be effectual, but medicine is never more efficacious, he thinks, than in the first, if the disorder be not combined with some other, and it be taken in time; though the crouping may be very considerable. This I saw remarkably exemplified in a little boy of my own, who was nearly cured in two days. The sovereign remedy he directs, is *asa foetida*, which is to be administered both by the mouth and in clysters, in doses according to the exigency of the complaint; and where no marked inflammation has taken place, may be given very freely; and afterwards the bark, when the spasms remit.

THIS account of the disease can certainly apply only to the spasmodic, and is not the dangerous disorder usually known in this city by the term Croup, being totally unaccompanied with inflammation, at least is so, whenever

whenever afa foetida is thus useful. And this seems further evident from the recovery of such patients, and the consequent want of proof of the existence of that tough membrane found in those who have died of the inflammatory croup; in whom the disease is always of short continuance after the croaking noise in respiration, has taken place. Whereas, the other kind of croup has sometimes been known to continue for two months, and then has yielded to opium. Instances have likewise been met with of children crouping for two or three days, and being then seized with whooping-cough, which has instantly removed the croup: these circumstances seem to prove that species of croup to be truly spasmodic*. I have seen it, more than once, in this form attend the cutting of teeth; being then the mere consequence of irritation, as we see cough, and various other symptomatic affections induced at this period.

* See the chapter on *Inward-Fits*, Page 53.

BESIDES a fa foetida, emetics, and hemlock will frequently be found necessary, and sometimes the bark; one or other of which must be persevered in, as long as any symptoms of disease, and particularly the croaking noise, shall continue.—From the success attending this practice, and a proper discrimination of the disease, there may be more room for hope in this cruel disorder, than some physicians have been induced to think.

BUT the other species of croup is a most dangerous disorder, being, it has been said, truly inflammatory in the first instance, and is, I believe, always attended with a quick pulse, cough, and difficulty of breathing very soon after the croaking noise has taken place. It does not always seem to be an original disease; being sometimes a consequence of bad fevers, especially the scarlet-fever, as well as of some chronical disorders that have reduced the patient's strength, and is then much more dangerous. But the worst kind frequently appears from the same causes as the malignant fore-throat, only having its
seat

seat lower down, and is therefore more severe. And it has, in several instances, accompanied it, as may be known in the early stages of that complaint, by the croaking noise peculiar to the croup; and, I believe, is in such instances generally fatal. It has likewise accompanied the last stage of the putrid thrush, and carried off the little sufferer in a few hours.

ON this species little more need to be said; the disease being always short, and the treatment, as I think, very evident. Four, six, or even more leeches should be immediately applied to the throat, especially if there be any perceptible fulness of that part, or manifest fever, and a blister be applied to the nape of the neck. The patient may likewise breathe the vapour of warm water with vinegar in it. After the leeches and blisters have been applied, a vomit should be administered, and the sickness kept up for several hours, by small doses of the antimonial powder; which has succeeded in several instances when recourse has been had to these means

means on the commencement of the disease.—At the close of the complaint, and to prevent a relapse, the bark proves highly serviceable, and will also restore the strength of the patient.

RICKETS.

THIS is a late disorder in *Europe*; and *England* is said to be the part in which it first made its appearance, though some writers have conceived that it raged at the same season over all *Europe*, through the coldness of the weather. It was first noticed in the western parts of *England*, about the year 1628, and is said to have taken place upon the increase of manufactures, when people left the villages and husbandry, to settle in large manufacturing towns; where they wanted that exercise, and pure air, which they had enjoyed in their former situation, and employments.

It may, therefore, frequently arise from unhealthy parents, especially from mothers who

who pass a sedentary life in a bad air, and feed upon a weak and watery diet; from children's food being weak, watery, or too viscid to be properly digested; but above all, perhaps, from bad nursing, and children being left wet, dirty, or exposed to a cold moist air, without sufficient covering; from want of proper exercise, and from close and crowded apartments. On this account, children of poor people are particularly liable to this disorder: parents, and governors of work-houses, ought therefore carefully to guard against the last mentioned causes.—Or lastly, from the habit of body being reduced by the long continuance of almost any of the complaints hitherto considered.

THE usual SYMPTOMS of rickets are soft flesh; bloated, or a very florid countenance; weakness; dislike to motion; with enlargement of the belly, head, and joints. The wrists and ankles enlarge first, afterwards the back, and breast-bones; and, indeed, all the bones swell and become soft, especially the more spongy ones. The pulse is quick, and feeble,

feeble, and the appetite and digestion usually bad. Teething is commonly late, though not frequently difficult, but the teeth often rot early and fall out. Great acuteness of mind has been observed in this, and some other chronical complaints. It seldom attacks children before they are six months old, or above two years.

As it appears to arise from a general weakness and relaxation, the indications of CURE are to brace and strengthen the solids, and to assist the digestion. These ends will be promoted by wholesome, and dry food, suited to the age; good bread, or biscuit; and roasted meats, rather than boiled; with a little red Port wine. Should the child be too young to eat flesh meats, its diet ought to be chiefly of broths, milk, rice, millet, pearl-barley, (thoroughly boiled) salep, and semolina, with spices, if it be not inclined to be feverish.—This, however, is sometimes the case in older children, though, perhaps, too rarely suspected, and requires in that stage of the disease a very opposite treatment; even
small

small bleedings being then found serviceable.—The child must above all have good nursing, and especially exercise and air, without being kept very hot or very cold: unless a strict attention be paid to these particulars, medicine can be of but little service. If the child be too young to exercise itself by walking and such like, the nurse, besides affording it every exercise it can bear, may induce the infant to exert itself to no small advantage, by the following easy means. She has only to dash a few drops of water suddenly in its face several times a day, in the manner often done to recover people from a swoon, though less violently. This will oblige the infant to put almost every muscle into action, by which the blood will be forced through the minute vessels, and many of the advantages of exercise produced, and in a more powerful manner. To the same end, linen cloths wetted with cold water, with the addition of a little spirit of any kind, may be applied to the arms and legs, or along the back-bone, every time the child is dressed
or

or undressed, especially if the bones in any of these parts are become enlarged or distorted by the disease. The parts should afterwards be rubbed very dry with a piece of warm flannel.

IF the child be of a gross habit, the eighth part, or a quarter of a grain, of ipecacuanha powder, taken once or twice a day; gentle pukes, and very brisk purges, especially of the powder of scammony with calomel, prove of use. The compound tincture of aloes is also a good medicine, a few drops once or more in a day, (as may suit the state of the bowels) taken on a bit of sugar, or otherwise. In such habits, all foundation of a cure must be laid in reducing the belly to its proper size, and in strengthening the stomach. If rather delicate, the cold-bath is often of more service than any thing else: but this should not be entered upon in winter, nor without previous purging. Frictions afterwards with flannel and aromatic powders, or the fumes of frankincense, mastic or amber, especially on the back and belly, will

further tend to strengthen the habit. Besides such means, the cold infusion of bark, and other bitters, especially columba; or small doses of the martial flowers, tincture of myrrh, or steel-wine, are often serviceable: but it was before remarked, that a good diet, air, and exercise, especially riding on horse-back, are of the utmost consequence; which if duly persevered in, and the state of the stomach and bowels properly attended to, will often effect wonders. Parents, therefore, ought not to despair of a cure under any circumstances, provided the internal and vital parts are not diseased; much less should they be so greatly alarmed as they usually are, at the slightest symptoms of this disease, when its true cause has been discovered, and proper remedies are applied. Besides, this is one of those chronical, or lingering complaints, which seem to be gotten the better of by time, and like the following one, wears itself out, as it were; and to which the above mentioned means will greatly contribute.

SCROFULA,

SCROFULA, *or* KING'S-EVIL.

THIS is primarily a disease of glandular parts, though in its progress it attacks the adipose membrane, (or fat) the eyes, the muscles, tendons, and even the bones themselves, especially the joints. Such at least has been the general opinion, though from later investigations there is reason to imagine that it originates in the cellular membrane, under the skin. It seldom makes its appearance before two years of age, nor later than ten or twelve, (unless it be in regard to affections of the eyes,) though there are more exceptions in respect to the latter period; and it then often proves fatal, by falling on the larger joints, the lungs, or other noble part. It is frequently observed to follow other disorders, particularly the small-pox, whether taken naturally or from inoculation, and more especially the former; also the whooping-cough, measles, teething, rickets, and

many other disorders already mentioned. Hence, the nature of this disease is better understood, as it so often falls upon weak and tender habits, either originally of a soft fibre, or worn out by previous diseases; or is gradually brought on by a heavy, indigestible, and bad diet, or a low, wet, and unhealthy situation. It is, however, sometimes found to be hereditary, but will very frequently lie dormant for two or three generations, and afterwards appear with redoubled violence; as well as affect the greater part of a family very much, whilst the rest shall be entirely free from it. It is often attended, or rather preceded, by a peculiar look about the eyes, which are generally large, and a thickness of the upper lip; and sometimes proves a source of ill-health through life, but is not usually fatal in the first instance. Long before the external glands become affected, especially in young subjects, the belly is sometimes observed to be hard and enlarged; and at length, the
mesenteric

mesenteric glands, (disperfed through the bowels) the lungs, and even the pancreas, (or sweet-bread) have been found difeafed.

THOUGH this is always a very unpleafant complaint, and frequently does not admit of fo much relief by medicines as many other diforders, yet it oftentimes difappears at the time of puberty, (and fometimes fooner) efpecially in females; but whether this be owing to the increafed ftrength of the folids, or to other changes in the habit, naturally happening at that period, is not an inquiry proper for this place. On the other hand, after difappearing for feveral years, during which perfect health has been enjoyed, the humour has, unexpectedly, fallen upon fome internal glandular part, frequently the mefentery, (or connecting membrane of the bowels) occafioning various pains and complaints, often attributed to other caufes, and has undermined the conftitution; producing ultimately the true confumption, or a fatal wafting.

ALTHOUGH I thought it very neceffary to mention this difeafe amongft others to which

the state of childhood is liable, I am sensible how difficult it would be to point out any thing like a general, and adequate remedy. At its first appearance, however, bitter, or mercurial purges, are sometimes of use, as are also antimonial vomits, and sometimes burnt-sponge, (either in substance, or infusion) and saponaceous medicines, warmed with spices, and continued for a length of time; though it should be observed, that this disorder sometimes falls on habits of a less cold temperament, and may then, for a while, call even for cooling remedies. But when the disease is confirmed, lime-water, and decoctions of the woods, together with crude antimony, bark, and steel, with wine, and a generous diet, are most to be depended upon as internal remedies; from some of which, I have seen no inconsiderable cures effected. But in this, as in other chronical complaints, good air and exercise are of the greatest importance. Indeed, the advantage of exercise in this disease is so great, that I wish to lay a very great stress on it. But then it must be
daily

daily had recourse to, and, by degrees, be so considerable, as to render the patient every night sensibly fatigued. Thus, I have known riding behind a carriage, almost without the aid of any medicine, entirely remove the complaint.

WHEN there are external tumours, I am satisfied that the opinion I have already given to the public, in a larger tract on this complaint, is both rational and safe; and that whenever they are at all disposed to come forward, and not seated on improper parts, they ought to be brought to as speedy a suppuration as is possible. To this end, paste made of honey, flour and yelk of egg should be applied twice a day, and the parts be electrified. The scrofulous virus when thrown on the surface, so far resembles the cancerous, that it is inclined to spread to a considerable extent; but as tumours of the former class will bear rougher treatment than the latter, I am confident that much benefit may arise from the use of external stimulants, by stopping the progress of the

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disorder

disorder in the neighbouring parts, as well as by invigorating them, and thereby disposing the ulcers to heal. Of this kind, are fumigations of the red sulphurated quicksilver, and quicksilver with brimstone. Also light frictions with mercury, so as to make it pass freely through the lymphatics of the distempered parts, without affecting the system, have in a course of time been beneficial, and deserve to be brought into more general practice than they have hitherto been. But the application of such remedies requires the best medical aid.

UNDER such a plan, it will be very necessary that the body be kept open; and to this end, one dram, or more, of Epsom salt may be dissolved in a pint of water, and taken every day as common drink. This quantity of salt will give very little taste to the water, and, in some instances, has alone had a good effect in this dreadful complaint, especially in stronger children and such as are otherwise healthy. On the other hand, children of a delicate and spare habit

habit are more likely to be benefited by the tonic (or bracing) remedies before mentioned, and such as warm and invigorate the system; of which class the following is a very good one.

TAKE of prepared ammonia two drams;
Gentian-root, sliced, one scruple:
Pour on these twelve ounces of brandy.
Let the quantity of a pap, or a table-spoonful be taken in a proper quantity of water, three or four times a day.

I HAVE had further reason to be confirmed in the above opinion respecting stimulants, from observations communicated to me by Mr. PARTINGTON, who since the hints I threw out in the afore-mentioned work, has made use of electricity with very good effects, in these, as well as other cold tumours and ulcers I had mentioned; which have all healed very kindly, in consequence of this stimulus to the parts. When scrofulous ulcers have been healed, and only some small tumours remain, I have experienced very good effects from the external use of
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as strong a solution of camphor in oil of almonds as can be made, which has dispersed them very soon.

AN obvious discrimination should be made in regard to tumours about the neck, at the sight of which parents seldom fail to be alarmed; since many of them are of a harmless nature, or even salutary, the consequence of a slight feverish disposition, or of some little cold from a sudden stroke of air on the neck. These rise suddenly, become painful, and increasing daily in size, either very soon put on the usual appearance of suppuration, or begin to subside; and whether they break or not, are no indication of any thing materially wrong in the habit. On the contrary, scrofulous tumours always rise slowly, unless in very young infants, and after the small-pox; often continue a long time at a stand, and sometimes are not only months, but even some years before they suppurate; and then with very little pain, or true inflammation.

I SHALL only add further on the head of
scrofula,

scrofula, what is very well known, that sea-bathing alone, sometimes effects a perfect cure. Should the child therefore have several scrofulous tumours, or the habit be conceived to be much affected, trial should be made of the sea, in whatever manner it may be determined the tumours shall be treated, if not dispersed by sea-bathing, as they frequently are.

MUCOUS URINE.

THE complaint here intended arises from an affection of the coats of the bladder, or of the prostate gland, which surrounds its neck; though the same symptoms may also arise from the ureters or kidneys, whether owing to a stone or other stimulus.

It sometimes appears during teething, and other inflammatory affections, and will then call for cooling remedies: it generally disappears when the teeth have made their way through the gums, and the fever subsides. In more advanced childhood, there
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is nothing like fever or other precise marks of disease, though, it may be said, this disorder more commonly attacks children of a tender and delicate habit.

It is attended with frequent inclination to void the urine, and with more or less pain in its excretion, or more commonly, I think, before it begins to come away. The urine is very foul, is loaded with a very ropy mucus, and sometimes comes away discoloured with blood, and at others, small clots fall to the bottom.

ALTHOUGH the urinary passages in young people are stimulated by very trifling causes, yet is this appearance, nevertheless, alarming; as it may, possibly, arise from a morbid affection of the prostate gland, or the bladder, and must then be a serious complaint; or it may be owing, it has been observed, to a stone in any of the urinary passages, in which case a cure cannot be effected as long as the stone remains. Fortunately, however, this is not a frequent cause in early childhood; nor is it the case here intended.

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THE disorder sometimes yields in two or three weeks to mere diluent, and softening and aperient medicines, such as the milk of almonds, with syrup of marshmallows, barley-water and gum arabic, spermaceti, manna, and such like; and it is probable, in such instances, might in a short time disappear of itself.

IN other instances, more powerful means are required, which, either by creating a different stimulus, change the action of the parts affected, or, by their restringency, prevent that secretion which has been the cause of the irritation.

THE lime-water, water of kali, balsam of copaiba, or a decoction of the bark, seem to be the properest remedies in the absence of fever. From three to ten drops of the water of kali, or balsam of copaiba, according to the age of the child, will be a proper dose, and may be taken three or four times a day, as the urgency of the complaint may require.

AFTER appearances of being perfectly
well,

well, the urine, in some instances, has become as turbid and mucous as at first, and the former irritation returned. In such case, the complaint has immediately yielded to an infusion of the golden-rod, of which two or three table-spoonsfull may be taken three times a day.

SUPPRESSION *of* URINE.

THIS dangerous disorder is easily distinguished from the ordinary suppression of urine, in which the secretion is duly made in the kidneys, and the urine conducted to the bladder, but being detained there, the accumulation is readily discovered both by the pain and tumour on the lower part of the belly, or seat of the bladder. In the former, on the other hand, the urine is not secreted at all; but the superabundance of watery fluid is retained in the blood.

THIS disorder, I believe, is less common in children than in adults, especially elderly people, but is equally fatal in both, if the
secretion

secretion be not restored in about twenty-four hours; though the suppression is not commonly preceded by any considerable derangement of the general health.

THIS disorder has been met with in infants several times of late years, and the disease in all of them has been introduced by similar symptoms; a slight feverish heat being observed for about a week, accompanied with purging, and sometimes bilious vomitings. Towards the end of this time the urine was made in small quantity, and in about twenty-four hours the discharge of it entirely ceased, and the patients died unexpectedly, without complaining of pain or any particular uneasiness.

INTERNAL inflammation is judged to be the source of the first symptoms, which has been followed by a mortification. One child was recovered from the suppression, and restored to health by the application of leeches to the belly, and a blister near the seat.

THE above mentioned remedies, with gentle purges, clysters, and cooling diuretics,

tics, and the repeated use of the warm-bath, are, probably, every thing that our art has to offer for the cure of this novel disease in infants; and were its symptoms more distinctly marked, or formidable in their first appearances, so as to lead to a recourse to it on the earliest approaches of the disorder, the remedies might be oftener successful than they have hitherto been.

THE GRAVEL.

ALTHOUGH we see children of almost every age afflicted with stone in the bladder, and such frequently voiding gravel mixed with their urine, the gravel is, by no means, a common complaint in others. I have, however, been several times consulted for children, under three years of age, who have been so affected.

THE disorder, I believe, is usually slight at this early age, and merely accidental, sometimes disappearing of itself in a few days, or after taking only a little oil and manna, or
other

other soft laxative, and some of the demulcent medicines recommended for mucous urine. In other instances, I have directed a decoction of marsh-mallow and parsley roots, or the infusion of sweet-fennel and wild parsley seeds, sweetened with syrup of marsh-mallows, or honey. A bit of castile soap also may be dissolved in milk and taken as a breakfast, or supper; or a few drops of balsam of copaiba, be administered two or three times a day, and the body kept open by the tartarised kali, or the polychrest salt.

SHOULD the complaint be attended with much pain, the warm-bath would, probably, be useful; but I have never known it so great as to require any kind of opiate.

INCONTINENCE *of* URINE.

THIS is not a very common complaint in children, unless combined with the stone in the bladder, and then is not so constant, nor to the degree that is intended here. It is an involuntary flow of the urine, sometimes by

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day as well as during the night; arising from a relaxation or other affection of the sphincter, or contracting muscle, of the bladder, but is not attended with manifest fever, nor symptoms of decay. An affection of this kind, in which the urine runs away in the sleep only, is more common; and I have known it continue to the age of fifteen or sixteen years when not properly treated, and afterwards yield to sea-bathing. If, however, it be an original affection, and confined only to the night, (when every part is more disposed to relaxation) and the child be young, it usually disappears as the child grows up, and thereby acquires strength; but it may be often assisted in the mean time, merely by exercise, living on dry food, dashing the contiguous parts with cold water, and such little means as may tend to impart tone to the sphincter muscle and the neck of the bladder; and scrupulously abstaining from drink near the time of going to bed.

THE total incontinence generally comes on gradually, and is sometimes attended with
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an excessive, and weakening-discharge, even in very young children, and is more difficult of cure: so likewise, if the complaint should succeed to other disorders, as the stone, or inflammation of the neck of the bladder; and especially, if it follow a disposition to sleeping too much, or the palsy of any part.

TINCTURE of catechu, or of gum kino; the bark; balsam of copaiba; and white vitriol may be made trial of: but nothing is usually so effectual as repeated blisters applied over the seat, or lower part of the back; with proper doses of the tincture of Spanish-flies, given in some soft emulsion, and under due cautions. This may be administered in doses of ten or fifteen drops to children from five to ten years of age, and increased to two scruples and a dram; which has generally removed the complaint if there has been no morbid affection of the spine, as is sometimes the case. If these means should fail, recourse should be had to sea-bathing.

EXCESSIVE THIRST.

THE affection here adverted to is not symptomatic, as in fevers, but is an original disease, though it seems to depend, indeed, upon a peculiarity of temperament; and is equally incident to children, as to adults. It is, however, so rare a complaint in either, that but little can be said of its true nature, there being only four or five instances of it, I believe, upon record. Of these, one began at, or soon after birth, and another when the child was about four years and a half old; a short time before it was seized with the natural small-pox. The former is now an adult, and the mother of eleven children, in whom the disorder still continues in a very extraordinary degree. The latter is yet a child, is very lively, and though apparently healthy drinks every twenty-four hours ten quarts of water, and makes daily twelve of urine, as pale as the water he drinks. Through
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the day he requires a draught every half hour, and once every hour in the night.

THE above mentioned instances of it occurred in *France*; and one has been met with in *Stanground*, near *Peterborough*, in an adult man near fifty-five years old, in whom the affection first took place after an ague and fever, when he was in his twenty-seventh year. A similar case also presented about three years ago at the *Middlesex-hospital*. This was in a child, but the thirst was not in this instance so great as in the aforementioned ones.

THOUGH I can, indeed, have nothing to offer with any confidence, for the treatment of a disorder which I have never yet seen, and which depends upon a peculiar temperament of the body; yet this rare and curious disease appears worthy of some notice in a work that is thought to comprehend a complete account of the disorders of children. A slight record of it will also possess the further advantage of apprising those who have the care of their health, of there being such a complaint; which it is presumed cannot fail

fail of being acceptable, if any into whose hands the work may fall should meet with children who have any evident tendency to it.

How far internal bracing medicines, with the cold-bath and electricity, or attempting to promote insensible perspiration, might tend to a removal of it, upon its first approaches, though I can by no means venture to say, they seem to be worthy of trial; but if neither these, nor any other remedies that may be suggested, should pretty soon afford any degree of relief, it is presumed, that no violence should be offered to so peculiar a temperament, lest some worse or real evil should appear in its place.

*The SEVEN-DAYS-DISEASE, and PECHEGUERA
of Spanish South-America.*

I SHALL close this part of the work with a brief account of two very extraordinary disorders, which should have been noticed among the early complaints of infants, if they
had

had been diseases of this country, or even much known in other parts of *Europe*. As the *seven-days-disorder* has, however, actually made some appearance in this quarter of the globe, and may, therefore, at some future period, become more common, it may be proper it should be mentioned in a work of this kind.

THE following brief account is taken from the *Spanish* work of *D. Ulloa*, (*Disc. XI. § § 19 and 20*) and *Barrère's Voyage to Guinea*.

IT is a common disorder of new-born infants in both quarters of *America*, and equally dangerous in the high, as in the low parts. A great number of infants die of it, without any symptom antecedent to its accession, leading to a suspicion of it. They are, on the contrary, apparently healthy and robust, when the disorder makes its attack in the form of epilepsy; and few of those who are visited with it are found to recover. Though, it has been said, this complaint is not altogether unknown in *Europe*, it is
neither

neither so common, nor so dangerous. It is conceived that the best preventive would be to guard infants from being exposed to the wind, till the first seven days are over.

THIS imperfect account allows of very little comment, though it seems probable, that the disorder may not be very unlike the tetanus * of the *West-Indies*.

INFANTS at *Guaneavelica* are still liable to another very extraordinary complaint. Having escaped the seven-days-disease, they thrive well until the third or fourth month; they are then seized with cough and affections of the chest, which they there call *peche-guera*. The complaint goes on increasing without any sensible relief from the medicines made use of; and a swelling taking place, they presently die. The disorder attacks only the *white people*, or children of the *Spaniards*; the *Indians* and the *Mongrels* are not subject to it. The way to escape it, is to remove infants from the spot, be-

* Page 200.

fore they are two months old, and to carry them to more favourable climates, into one of the *Zuebrades*, (or low grounds between the mountains) that are at a little distance. It is imagined, that the cold and intemperature of the climate is the occasion of infants being so soon seized with this complaint. This may be the case in some degree: but the vitiated habit of body of their parents, and the sulphurous vapours continually arising from the furnaces for the extraction of mercury, may likewise contribute to it. In fact; these vapours are so abundant, that when reunited by means of the cold, they form such a thick cloud in the atmosphere, during the season there called summer, as to cover all the colony.

THE END OF THE FIRST VOLUME.

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Underwood, Michael

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